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BUREAU OF MINES MINERALS YEARBOOK

The Mineral Industry of the Islands of the Caribbean

UNITED STATES DEPARTMENT OF THE INTERIOR

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The Mineral Industry of the Islands of the Caribbean

By Ivette E. Torres and Harold R. Newman

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ARUBA[1]

Aruba, formerly a part of the Netherlands Antilles, separated on January 1, 1986, and became an autonomous part of the Netherlands. Full independence of the island from the Netherlands is scheduled for 1996. In this chapter, however, Aruba's statistics are included with those of the Netherlands Antilles.

Tourism continued to be the main industry of the island, which continued to depend heavily on imports, mostly from the United States. During the year, the Government was preparing legislation to regulate the exploration of oil deposits in the relatively shallow sea around Aruba.

Monte Carlo Gold Mines Ltd., a Canadian company, obtained the exclusive mining concession to all of Aruba in January 1987. After some promising discoveries, the company developed plans to carry out a $2.5 million[2] gold exploration program that would cover the entire island. The first step of the exploration program included an airborne electromagnetic and a magnetic survey of the island. After this was accomplished, Monte Carlo contracted with Terraquest Ltd. of Canada to do geophysical studies of selected areas that would be geologically sampled and mapped in detail. Preliminary exploration covered four sampling areas, each of which resulted in assays of over 1 troy ounce of gold per ton. Aruba has many known gold-bearing quartz veins as well as alluvial deposits. Aruba ceased all gold operations in 1916. In 1986, Canarub Gold Development N.V. conducted some mill tailings studies but found the gold recovery project uneconomical.

The Government of Aruba and the Caribbean Development & Commerce Co. agreed to reopen the former Exxon Corp. Lago refinery in 1987. The 400,000-barrel-per-day refinery was closed in March 1985. The agreement included a 10-year tax exemption. Instead of taxes, the company was to pay royalties. Investments necessary for refurbishing the refinery were estimated at $50 to $75 million. Reportedly, a Norwegian company was to provide the financing.

Table 1.—Islands of the Caribbean: Production of mineral commodities[1]

(Metric tons unless otherwise specified)

Country[2] and commodity	1983	1984	1985	1986[p]	1987[e]
BAHAMAS[3]					
Cement, hydraulic	25,683	--	--	91	--
Petroleum refinery products[e] thousand 42-gallon barrels	62,780	44,000	6,000	--	--
Salt thousand tons	862	[e]870	[e]850	899	[e]736
Stone: Aragonite do.	2,337	[e]2,200	[e]2,000	427	[4]1,524
Sulfur, byproduct of petroleum[e] do.	5	3	1	--	--
BARBADOS[3]					
Cement, hydraulic do.	--	[e]150	[e]215	199	[4]205
Gas, natural:[e]					
Gross million cubic feet	752	89[r]	900	900	800
Marketed do.	360	370	370	370	360
Petroleum:					
Crude thousand 42-gallon barrels	380	635	679	559	510
Refinery products[e] do.	1,480	1,500	1,500	1,500	1,400
CUBA[3 5]					
Cement, hydraulic thousand tons	3,231	3,347	3,182	3,305	3,500
Chromite do.	34	38	38	108	110
Cobalt[4]	1,621	1,397	1,490	1,578	1,600
Copper, mine output, Cu content	2,667	2,701	3,076	[e]3,300	3,000
Gas, natural:					
Gross[e] million cubic feet	2,300	2,300	2,400	2,400	2,300
Marketed do.	293	120	244	[e]260	240
Gypsum[e] thousand tons	130	130	130	130	130
Iron and steel: Steel, crude do.	352	325	401	416	420
Lime do.	153	151	170	[e]180	160
Nickel:					
Mine output, Ni-Co content of oxide and sulfide	39,257	33,227	33,577	35,101	35,800
Metallurgical products, Ni content:[6]					
Granular oxide and powder	9,342	8,447	8,853	8,382	9,100
Oxide sinter	11,542	8,894	7,054	8,278	7,400
Sulfide	16,752	14,489	16,180	16,863	17,700
Total	37,636	31,830	32,087	33,523	34,200
Nitrogen: N content of anhydrous ammonia thousand tons	86	[r]171	189	[e]160	150
Petroleum:					
Crude[7] thousand 42-gallon barrels	4,937	5,125	5,771	[r e]6,000	6,600
Refinery products do.	48,180	48,340	46,020	[e]46,500	46,500
Pyrite, gross weight thousand tons	13	--	--	--	--
Salt do.	180	185	221	[e]230	230
Sulfur:[e]					
S content of pyrite do.	5	--	--	--	--
Byproduct of petroleum do.	8	8	8	8	6
Total do.	13	8	8	8	6
DOMINICAN REPUBLIC[3]					
Aluminum: Bauxite, dry equivalent, gross weight do.	--	--	--	--	[4]211
Cement, hydraulic do.	1,104	1,143	1,007	1,066	1,100
Coal, subbituminous	--	--	[e]600	[e]600	600
Copper, mine output thousand tons	[e]3	--	--	--	--
Gold thousand troy ounces	354	338	328	284	[4]246
Gypsum:[e]					
For cement manufacture thousand tons	180	180	280	102	42
Other do.	30	30	30	30	17
Iron and steel: Ferroalloys, ferronickel[8]	52,278	63,966	68,824	58,640	64,000
Lime[e]	40,000	40,000	34,000	34,000	36,000
Mercury 76-pound flasks	40	40	20	13	2
Nickel:[9]					
Mine output, Ni content	19,552	23,923	25,394	21,878	[4]32,521
Metal, smelter, Ni content of ferronickel shipments	21,200	24,220	25,809	21,989	[4]29,051
Petroleum refinery products thousand 42-gallon barrels	10,910	[e]11,000	12,647	[e]13,000	13,000
Salt[e]	60,000	60,000	[4]47,159	54,000	55,000
Silver thousand troy ounces	1,329	1,307	1,581	1,358	[4]1,148
GUADELOUPE[3]					
Abrasives, natural: Pumice[e] thousand tons	240	250	215	[r]221	220
Cement do.	[e]160	170	173	181	190
HAITI[3]					
Cement, hydraulic do.	[r]230	220	220	180	200

See footnotes at end of table.

Table 1.—Islands of the Caribbean: Production of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Country[2] and commodity	1983	1984	1985	1986[p]	1987[e]
JAMAICA[3]					
Aluminum:					
Bauxite, dry equivalent, gross weight thousand tons	7,683	8,937	5,975	6,964	[4]7,833
Alumina do.	1,851	1,749	1,513	1,575	[4]1,626
Cement, hydraulic do.	277	261	240	241	[4]302
Gypsum do.	108	180	179	117	[4]176
Lead, refined (secondary)[e]	1,000	1,000	1,000	1,000	1,000
Lime thousand tons	121	115	86	[e]92	90
Petroleum refinery products thousand 42-gallon barrels	8,366	8,243	9,008	9,39[illegible]	9,200
Salt	--	--	[e]200	[e]200	200
Silica sand thousand tons	15	14	16	12	19
Stone:					
Limestone	--	[e]83,000	5,304	5,331	[4]5,650
Marble	320	370	50	200	10
Marl[e] thousand tons	9,069	8,640	6,210	[r]7,020	6,990
Sand and gravel[e] do.	9,135	8,625	13,750	9,219	[4]1,770
MARTINIQUE[5]					
Cement, hydraulic[e] do.	207	190	[e]200	[e]200	200
Petroleum refinery products thousand 42-gallon barrels	4,300	4,300	4,300	4,988	4,800
Pumice, converted from cubic meters[e] thousand tons	146	136	[e]150	[e]140	130
NETHERLANDS ANTILLES[3]					
Petroleum refinery products[e] thousand 42-gallon barrels	150,700	139,000	20,000	[4]58,400	83,600
Phosphate rock thousand tons	3	19	[e]20	[e]20	16
Salt[e] do.	283	356	350	350	350
Sulfur, byproduct of petroleum do.	87	63	[e]25	[e]40	60
ST. VINCENT[3]					
Salt[e] do.	50	50	50	50	50
TRINIDAD AND TOBAGO[3]					
Asphalt, natural do.	37	34	33	27	26
Cement, hydraulic do.	[r]390	405	328	327	[4]327
Gas, natural:					
Gross million cubic feet	225,999	268,369	318,954	226,953	212,000
Marketed do.	109,627	119,695	124,197	[e]132,300	123,000
Iron and steel:					
Iron, sponge thousand tons	302	239	205	208	[4]483
Steel, crude do.	210	199	174	326	370
Semimanufactures (wire rod) do.	164	135	103	217	[4]291
Lead, refined (secondary)[e]	2,000	2,000	2,000	2,000	1,800
Natural gas liquids[e] thousand 42-gallon barrels	40	40	40	40	40
Nitrogen: N content of ammonia thousand tons	[r]1,208	[r]1,306	1,367	1,393	1,400
Petroleum:					
Crude thousand 42-gallon barrels	58,344	62,042	64,259	61,435	[4]56,621
Refinery products do.	27,178	31,077	29,678	[e]30,860	28,950
Stone: Limestone thousand tons	173	232	663	580	600
Sulfur, byproduct of petroleum[10] do.	10	[e]7	165	[e]5	5

[e]Estimated. [p]Preliminary. [r]Revised.

[1]Table includes data available through June 30, 1988.

[2]In addition to the countries listed, Antigua, Bermuda, Dominica, Grenada, Montserrat, and St. Lucia presumably produced crude construction materials (clays, sand and gravel, and stone), but output is not always reported, and information is inadequate to make reliable estimates of output levels.

[3]In addition to the commodities listed, crude construction materials (lime, salt, sand and gravel, stone, etc.) may also be produced, but data on such production are not always available and information is sometimes inadequate to make reliable estimates of output levels.

[4]Reported figure.

[5]In addition to the commodities listed, iron ore and manganese ore presumably were produced during the period covered by this table, but available information is inadequate to make reliable estimates of output levels.

[6]Anuario Estadistico de Cuba provides figures on nickel-cobalt content of granular and powder oxide, oxide sinter, and sulfide production. Using an average cobalt content in these individual products of 0.9% in total granular and powder oxide, 1.1% in total oxide sinter, and 4.5% in total sulfide, the cobalt content of reported Ni-Co production was determined as being 1.16% of granular and powder oxide, 1.21% of oxide sinter, and 7.56% of sulfide. The remainder of reported figures would represent the nickel content.

[7]Cuba reports crude oil production in metric tons. A conversion to barrels was made using a factor of 6.652. Some published production figures indicate a need to use a conversion factor of 7.3 to balance the units of measurement. However, pending more accurate information, the original factor will continue to be used in this publication.

[8]The Dominican Republic reports gross weight of ferronickel production. When official data are not available, figures for nickel content of mine production are determined from an average of 37.4% Ni contained in ferronickel production. Nickel content of ferronickel shipments is obtained from Falconbridge Dominicana C. por A. annual reports.

[9]Exports.

[10]Limited quantities of sulfur as a byproduct of natural gas may also be produced.

BAHAMAS[3]

The Bahamian economy continued to expand in 1987. Gross domestic product (GDP) increased by 8% relative to 1986. Tourism and banking were the mainstays of the economy. Construction was slowing down. Declining oil prices helped narrow the current account trade deficit but the Bahamas remained dependent on imports.

The Bahamas Oil Refining Co. (BORCO), with a capacity of 350,000 barrels per day, remained closed. Chevron Oil Bahamas Ltd. and Charter Oil Co., joint owners of the refinery, reached an agreement in 1987 whereby Chevron would assume full ownership in return for canceling the financially troubled Charter's debts to Chevron. No monies were involved in the transfer. Chevron was not expected to reopen the refinery in the near future. The terminal facilities remained open and were used for the transshipment of crude oil and refined products by BORCO. The Bahamas has become an important oil transshipment point to the United States.

The Grand Bahamas Port Authority was considering building a large coal-fired electric generating plant in Freeport. The plant would use an underwater cable to connect with Florida Light and Power Co.'s transmission facilities in southern Florida. Freeport was considered a good location because of the proximity to southern Florida; its deep-water bunkering capacity would allow access to imported, low-cost, low-sulfur coal as well as the Bahamas tax advantage. Other advantages would be the reduction in the cost of electricity in the Bahamas and the opportunity to employ 1,000 workers.

Puerto Rico ordered Umar Cement Co., a major importer of cement from the Bahamas, Morocco, and Spain to stop construction of a 500-ton storage silo for cement. The project apparently lacked the necessary permits and was opposed by other cement companies who maintained that Umar contributed to the importation of cement from overseas. In 1987, Umar imported about 7,000 tons of cement from the Bahamas into Puerto Rico.

BARBADOS[4]

Real economic growth was estimated at about 2%. This was the fifth successive year of expansion in the Barbados economy and the third highest rate of growth since 1981. This economic growth was mainly attributed to tourism. Manufacturing output decreased and crude oil output continued its declining trend. The Barbados National Oil Co. Ltd. (BNOC) continued its policy of restricted exploration and production because of low world oil prices. As a result, crude oil and natural gas production fell by 11% and 15%, respectively.

Output at the Woodbourne Oilfields amounted to 497,000 barrels of crude oil and production of natural gas declined to 1,042 million cubic feet. The reduced oil and gas production resulted in increased fuel imports. Crude oil reserves at yearend were estimated at slightly over 3 million barrels. Estimated gas reserves were 6.6 billion cubic feet.

Cluff Oil Ltd. of the United Kingdom halted petroleum exploration efforts after completion of its first phase of exploration. The reasons given were low oil prices and the depth of water, which was over 2,000 feet. Cluff has exclusive exploration-production rights for a 400-square-mile block off Barbados' northwestern coast. As a result, the Government intended to commence a major onshore drilling program in 1988.

The Government was seeking to make Barbados more self-sufficient in energy and was encouraging alternate energy projects such as solar water heaters and wind-driven electric generators.

In 1987, BNOC purchased a natural gas liquid (NGL) processing plant through a loan of $2 million[5] from the Export Development Corp. of Canada and local funding of $1.4 million. The NGL plant has a capacity of 4.5 to 5 million cubic feet per day. At throughput levels of 3 million cubic feet per day, the plant will replace about 25% of imports of light-fraction petroleum products such as butane and propane. The plant will be situated near the Woodbourne Oilfields on the southeastern coast.

The Arawak Cement Co. Ltd.'s plant, which had never operated at top efficiency, was shut down in 1987 for repairs. Built in 1984 at a cost of $100 million, the financially troubled plant has had problems competing with other regional cement pro-

ducers. Two Puerto Rican cement producers filed an informal antidumping petition with the U.S. International Trade Commission alleging that Arawak sold cement in the Puerto Rican market at substantially lower prices than those charged in Barbados.

Table 2.—Barbados: Exports and reexports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Destinations, 1986	
			United States	Other (principal)
METALS				
Aluminum: Metal including alloys:				
Scrap	20	6	--	All to West Germany.
Semimanufactures				
value, thousands	$12	$1	$1	
Copper: Metal including alloys:				
Scrap	53	16	16	
Semimanufactures	42	--		
Iron and steel: Metal:				
Scrap	391	NA		
Semimanufactures:				
Bars, rods, angles, shapes, sections	4,814	NA		
Universals, plates, sheets	29	8	--	All to Antigua and Barbuda.
Wire	NA	247	246	Antigua and Barbuda.
Tubes, pipes, fittings	NA	1	1	
Lead:				
Oxides	9	5	--	All to Guyana.
Metal including alloys:				
Scrap	--	129	--	All to Trinidad and Tobago.
Semimanufactures				
value, thousands	$24	--		
Nickel: Metal including alloys, scrap do.	$3	--		
Silver: Waste and sweepings kilograms	73	NA		
Tin: Metal including alloys, semimanufactures value, thousands	$2	--		
Zinc: Oxides	--	1	--	All to Trinidad and Tobago.
Other: Ashes and residues	16	--		
INDUSTRIAL MINERALS				
Abrasives, n.e.s.: Unspecified	--	1	--	All to Grenada.
Asbestos, crude	1	--		
Cement	NA	153,213	47,526	Netherlands Antilles 15,898; Jamaica 14,300.
Fertilizer materials: Manufactured:				
Ammonia value, thousands	$4	$4	--	Dominica $2; St. Lucia $1; St. Vincent and Grenadines $1.
Nitrogenous	2	--		
Phosphatic	2	--		
Potassic value, thousands	$7	$1	--	All to St. Lucia.
Unspecified and mixed	NA	375	--	Mainly to St. Lucia.
Gypsum and plaster	40	339	--	NA.
Pigments, mineral: Iron oxides and hydroxides, processed	--	1	1	
Stone, sand and gravel:				
Dimension stone, worked	NA	41	--	Grenada 29; Trinidad and Tobago 6; Antigua and Barbuda 2.
Gravel and crushed rock	51	822	--	Trinidad and Tobago 800; St. Lucia 5.
Unspecified	--	30,047	--	Guadeloupe 22,600; Trinidad and Tobago 7,047; St. Vincent and Grenadines 280.
Talc, steatite, soapstone, pyrophyllite	--	1	--	All to Jamaica.
MINERAL FUELS AND RELATED MATERIALS				
Carbon black	1	NA		
Coal: All grades excluding briquets	1	--		
Coke and semicoke	30	--		
Petroleum refinery products:				
Gasoline, motor 42-gallon barrels	60	14,688	--	NA.
Mineral jelly and wax do.	39	31	--	St. Lucia 16; Grenada 8; St. Vincent and Grenadines 7.
Kerosene and jet fuel do.	NA	623,759	--	United Kingdom 36,731; St. Vincent and Grenadines 3,488; unspecified 583,900.
Distillate fuel oil do.	NA	323,779	3,335	Guyana 61,746; Greece 918; unspecified 257,780.
Lubricants do.	NA	91	--	St. Christopher and Nevis 14; Jamaica 5; Mexico 4.
Residual fuel oil do.	1,209,956	912,007	1,372	Guyana 425,281; Greece 2,404; unspecified 482,950.

NA Not available.

[1]Table prepared by H. D. Willis.

Table 3.—Barbados: Imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Oxides and hydroxides	10	6	(2)	United Kingdom 4; West Germany 1.
Metal including alloys, semimanufactures	147	6,447	6,099	Belgium-Luxembourg 274; United Kingdom 62.
Columbium and tantalum: Metal including alloys, all forms: Tantalum	1	?	1	
Copper: Metal including alloys, semimanufactures	48	3,841	770	United Kingdom 3,054; Canada 14.
Iron and steel:				
Iron ore and concentrate excluding roasted pyrite	--	996	--	All from Venezuela.
Metal:				
Pig iron, cast iron, related materials	393	2,108	1	Trinidad and Tobago 1,160; Venezuela 942; West Germany 5.
Ferromanganese	7,006	--		
Steel, primary forms	2,863	--		
Semimanufactures:				
Bars, rods, angles, shapes, sections	31,912	8,455	84	Trinidad and Tobago 5,470; United Kingdom 2,317; Belgium-Luxembourg 233.
Universals, plates, sheets	15,449	13,394	135	United Kingdom 10,888; Belgium-Luxembourg 1,009; Japan 617.
Hoop and strip	3	72	48	Belgium-Luxembourg 11; United Kingdom 10.
Rails and accessories	1	9	2	United Kingdom 7.
Wire	NA	201	23	United Kingdom 121; Belgium-Luxembourg 40.
Tubes, pipes, fittings	NA	40,336	1,656	United Kingdom 16,740; Republic of Korea 14,447; Japan 4,100.
Castings and forgings, rough	9	3	2	Canada 1.
Lead:				
Oxides	79	58	18	Trinidad and Tobago 39; West Germany 1.
Metal including alloys, semimanufactures	15	36	6	United Kingdom 30.
Magnesium: Metal including alloys, semimanufactures	--	2	(2)	Mainly to United Kingdom.
Nickel: Metal including alloys, semimanufactures	2	2	1	United Kingdom 1.
Silver:				
Waste and sweepings value, thousands	$1,194	$847	$841	Philippines $6.
Metal including alloys, unwrought and partly wrought do.	$1	$1	$1	
Tin: Metal including alloys:				
Unwrought do.	$4	--		
Semimanufactures	532	550	435	France 92; Japan 20.
Titanium: Oxides	244	595	91	United Kingdom 449; Norway 18.
Zinc:				
Oxides	16	26	5	United Kingdom 15; Belgium-Luxembourg 4.
Metal including alloys, semimanufactures	15	959	55	Canada 863; United Kingdom 41.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc.	NA	6	2	United Kingdom 4.
Grinding and polishing wheels and stones	7	7	2	Switzerland 2; Canada 1.
Asbestos, crude	4	898	898	
Barite and witherite	2,056	685	685	
Boron materials: Crude natural borates value, thousands	--	$1	--	All from United Kingdom.
Cement do.	$502	$294	$91	Spain $56; Belgium-Luxembourg $31.
Chalk	400	6	--	All from United Kingdom.
Clays, crude	NA	1,152	104	United Kingdom 1,031; Belgium-Luxembourg 13.
Diatomite and other infusorial earth	24	54	52	United Kingdom 2.
Fertilizer materials: Manufactured:				
Ammonia	NA	13	2	United Kingdom 10; Netherlands 1.
Phosphatic	NA	123	63	Netherlands 50; United Kingdom 6.
Unspecified and mixed	NA	2,408	77	Netherlands 1,298; Dominican Republic 547; West Germany 311.

See footnotes at end of table.

Table 3.—Barbados: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Gypsum and plaster	6,678	8,296	36	Jamaica 5,116; Dominican Republic 3,000; United Kingdom 144.
Lime	NA	640	--	All from United Kingdom.
Mica:				
Crude including splittings and waste	NA	9,386	4,544	Sweden 4,800; Norway 42.
Worked including agglomerated splittings	1	2	2	
Phosphates, crude	376	386	266	Belgium-Luxembourg 120.
Pigments, mineral: Iron oxides and hydroxides, processed	20	24	7	West Germany 7; United Kingdom 5.
Salt and brine value, thousands	$376	$327	$37	Canada $197; Jamaica $61.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	108	88	24	Italy 62; United Kingdom 1.
Worked	NA	50	41	Canada 5; Italy 1.
Gravel and crushed rock	NA	35,256	60	Canada 35,195; United Kingdom 1.
Sand other than metal-bearing	NA	144	95	NA.
Sulfur: Sulfuric acid	197	71	34	Netherlands 32; West Germany 5.
Talc, steatite, soapstone, pyrophyllite	NA	236	210	Norway 23; West Germany 2.
Other:				
Crude	--	69	62	United Kingdom 7.
Slag and dross, not metal-bearing	--	5,719	19	Venezuela 5,700.
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	--	6	1	United Kingdom 5.
Carbon black	76	13	4	United Kingdom 6; Canada 3.
Coal:				
Briquets of anthracite and bituminous coal	110	NA		
Lignite including briquets	--	18	18	
All grades excluding briquets value, thousands	$7	$9	$8	Canada $1.
Coke and semicoke	--	5	--	All from Belgium-Luxembourg.
Peat including briquets and litter value, thousands	$30	$53	$1	Denmark $15; Ireland $14; Canada $8.
Petroleum:				
Crude 42-gallon barrels	--	119	119	
Refinery products:				
Liquefied petroleum gas do.	115,118	111,580	4,501	Trinidad and Tobago 75,017; Netherlands Antilles 19,105; Venezuela 12,853.
Gasoline, motor do.	6,248	5,032	--	Trinidad and Tobago 2,338; Venezuela 1,708; Guatemala 986.
Mineral jelly and wax do.	559	1,055	252	Brazil 417; United Kingdom 181.
Kerosene and jet fuel do.	1,028,820	NA		
Distillate fuel oil do.	NA	278,176	--	Venezuela 221,584; Trinidad and Tobago 38,150.
Lubricants do.	84	119	105	United Kingdom 7.
Residual fuel oil do.	1,758,014	1,473,845	--	Venezuela 1,075,750; Trinidad and Tobago 212,048; Andorra 125,241.

NA Not available.
[1]Table prepared by H. D. Willis.
[2]Less than 1/2 unit.

CUBA[a]

At yearend, the Government of Cuba reported that, by September, total commodity production had reached 72% of the year's plan. The production of asbestos roof gutters, gray cement, gypsum, crushed stone, hydrated lime, and concrete sewage pipes exceeded the plan. The plan was met in the production of concrete blocks, clay bricks, and asbestos cement roof tiles. Imports decreased 7% and exports increased 9%. The Government reported the policy of import reduction from market economy countries to be a success, resulting in a 50% reduction in import expenditures. Imports from centrally planned economy countries increased slightly.

In 1987, Cuba signed a new trade agreement with The German Democratic Republic, its second largest trading partner. Reportedly, the new agreement represents an 8% increase in trade from that of 1986. Under the agreement, Cuba was to export a variety of commodities, including nickel, to the German Democratic Republic. For the first time, the agreement contained items such as trucks, hydraulic cylinders, sugar

industry equipment, and spare parts.

During the year, Cuba also signed trade and economic agreements with Cyprus and Peru, respectively, and held meetings with Brazil, after renewing diplomatic relations with Brazil in 1986. In April, Brazil's Ministry of Transportation announced that cooperation agreements between Cuba and Brazil would be signed relating to the automotive, maritime, rail, and air transport industries. Also in April, Yugoslavia signed a trade agreement with Cuba.

The National Labor Union Commission was formed. The union will deal with matters that relate to income, costs, and profits of enterprises as a response to the Government's efforts to eliminate unprofitability in Cuban enterprises.

On December 17, the sixth plenum of the Cuban Communist Party Central Committee was held. In the meeting, the 1987 social and economic accomplishments were summarized and the 1988 budget was presented and approved. The 1988 program and budget were based on a 2% to 3% increase in growth from that of 1987. The plan called for the currency in circulation to be limited to 1987 levels. Reportedly, the 1988 plan was to pay special attention to mineral prospecting, metallurgy of ferrous and nonferrous metals, and the oil industries, among other sectors.

Cimex S.A., a Cuban-Panamanian precious metals company, obtained Government permission to buy gold and silver bullion, jewelry, and other items from Cuban citizens in return for Government-approved bonds that could then be exchanged for consumer goods in Havana.

Mining continued to be a small but important sector of Cuba's economy. Expansion efforts continued in the nickel, marble, steel, and oil industries. Cuba was to invest $500 million[e] in the expansion of its principal steelworks, Empresa Metalúrgica José Martí in Havana during the year. When completed, the expansion would increase raw steel capacity from 350,000 to 600,000 tons per year. Initiated in 1981 with assistance from the U.S.S.R., the expansion was scheduled for completion in 1988-89. Cuba exported steel bars, billets, ingots, and wire rods to Asia, Latin America, and the Middle East.

Cuba ranks fourth in world nickel reserves, after Canada, the U.S.S.R., and the Republic of South Africa. In 1987, production of nickel-cobalt content of mine output increased slightly to 35,800 tons. During the year, efforts were made to bring one of three production lines at the Punta Gorda smelter to its full 10,000-ton design capacity. The second line, previously scheduled for completion during the year, had to be postponed.

The Punta Gorda nickel refinery, inaugurated early in 1986, produced only 1,200 tons of nickel that year, and production was reportedly still not up to standard by year-end 1987. Nickel extraction in the smelter is by the ammonia process. The product output has been complicated by the ore's high content of chrome, cobalt, and iron. Because of technical problems with the Punta Gorda refinery, commissioning of Las Camariocas refinery has been delayed and was expected no sooner than 1995. Government nickel production goals have been revised down to 60,000 tons per year in 1990 and 100,000 tons per year by 2000.

A storage facility with a throughput of almost 195,000 tons of ammonia per year was under construction in the Province of Camagüey. It will be the first installation of its kind in Cuba. The first stage consists of two tanks 23 meters in height and 29 meters in diameter each. The tanks, constructed with technical assistance from Spain, each will have a capacity of 10,000 tons of ammonia. Plans call for two additional tanks to be built by the U.S.S.R. Reportedly, refrigerated ammonia will be delivered to Cuba by 8,000-ton Soviet cargo ships. Approximately 45% of the ammonia will be utilized by the Revolución de Octubre fertilizer complex in Nuevitas. The remainder will be used in nickel and rayon processing. The first tank was scheduled for completion in January 1988 and the first ammonia shipment for March of the same year. A 19-kilometer pipeline will link the storage facility to the fertilizer complex.

The quarry of marble continued to be an important operation for Cuba in 1987. Marble deposits are found south of Cuba in the Isla de la Juventud (formerly known as Isla de Pinos). In the western region, marble deposits are in the Pinar del Río Province and in the central region the deposits are in the Provinces of Cienfuegos and Villa Clara. In the eastern region, marble is found in the subsoil in the Granma Province. Cuba exports nine varieties of marble.

A new marble complex, under construction since 1985 in Mariel, Havana Province, reportedly, was completed in July 1987. The complex, equipped with Italian-made equipment was to receive marble from Cienfuegos, Isla de la Juventud, Pinar del Río, and Villa Clara to produce marble tiles and dimension stone used in building facades. A large portion of the marble output was planned for export.

Table 4.—Cuba: Apparent exports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Principal destinations, 1986
METALS			
Aluminum:			
Ash and residue containing aluminum	578	364	Netherlands 362; Spain 2.
Metal including alloys:			
Scrap	4,760	4,161	Netherlands 4,100; Spain 61.
Unwrought	NA	90	All to Netherlands.
Semimanufactures	17	2	Do.
Chromium: Ore and concentrate	[r]41,607	[r]37,826	Czechoslovakia 28,000; Argentina 2,004; Canada 1,040.
Copper:			
Ore and concentrate[2]	3,118	2,621	NA.
Matte and speise including cement copper	32	NA	NA.
Ash and residue containing copper	502	163	All to Netherlands.
Metal including alloys:			
Scrap	7,875	6,451	Netherlands 6,165; Spain 269; West Germany 17.
Unwrought	NA	70	All to Netherlands.
Iron and steel: Metal:			
Scrap	116,929	111,035	Italy 60,206; Greece 49,563; Netherlands 1,062.
Pig iron, cast iron, related materials	24	NA	
Ferronickel	39	NA	
Steel, primary forms	22,514	8,080	All to Italy.
Semimanufactures	[r]95,970	[r]115,221	Italy 1,989.
Lead: Metal including alloys, all forms	540	146	All to Netherlands.
Nickel:			
Matte and speise	2,126	959	Italy 584; Japan 125; Yugoslavia 56.
Oxides and hydroxides, Ni content[2 3]	9,165	8,918	Czechoslovakia 3,297; U.S.S.R. 2,255; Italy 1,607.
Sinter, Ni content[2 3]	6,657	7,991	West Germany 2,099; East Germany 1,796; Sweden 912.
Sulfide, Ni content[2 3]	17,594	18,003	All to U.S.S.R.
Metal including alloys, all forms	2,082	501	All to Czechoslovakia.
Tin:			
Ash and residue containing tin	NA	21	All to Netherlands.
Metal including alloys, scrap	15	31	Do.
Titanium: Metal including alloys, all forms	NA	5	West Germany 3; United Kingdom 2.
Vanadium: Ash and residue containing vanadium	177	NA	
Zinc:			
Ash and residue containing zinc	800	674	All to Netherlands.
Metal including alloys, scrap	505	286	Do.
Other:			
Ores and concentrates	NA	8,105	Hungary 7,014; Austria 1,091.
Oxides and hydroxides	3	NA	
Ashes and residues	84	152	All to West Germany.
Base metals including alloys, all forms	NA	5	All to Netherlands.
INDUSTRIAL MINERALS			
Abrasives, n.e.s.: Artificial, corundum	25	NA	
Cement	[r]50,359	[r]58,901	NA.
Mica: Crude including splittings and waste	NA	503	All to United Kingdom.
Stone, sand and gravel:			
Dimension stone:			
Crude and partly worked	35	3,530	Hungary 3,181; Italy 341; Spain 8.
Worked	NA	12	All to Spain.
Sand other than metal-bearing	49	NA	
Sulfur: Sulfuric acid	NA	3,063	All to Netherlands.
Other: Crude	NA	18	All to Spain.
MINERAL FUELS AND RELATED MATERIALS			
Petroleum:			
Crude thousand 42-gallon barrels	1,367	885	Spain 821; Italy 64.
Refinery products: Gasoline, motor do.	1,605	974	United Kingdom 536; West Germany 256; France 182.

[p]Preliminary. NA Not available.

[1]Table prepared by H. D. Willis. Owing to a lack of official trade data published by Cuba, this table should not be taken as a complete presentation of this country's mineral trade. Unless otherwise specified, these data have been compiled from United Nations information and data published by the trading partner countries. The United States reported no trade in mineral commodities with Cuba in 1985 or 1986.

[2]Anuario Estadistico de Cuba, 1986.

[3]Includes contained cobalt.

Table 5.—Cuba: Apparent imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986[2]	Principal sources, 1986
METALS			
Aluminum:			
Oxides and hydroxides	1,149	1,024	All from Japan.
Metal including alloys:			
Unwrought	29	30	All from United Kingdom.
Semimanufactures	4,739	3,282	Hungary 2,017; Spain 1,179; United Kingdom 87.
Cadmium: Metal including alloys, all forms	NA	2	All from Belgium-Luxembourg.
Chromium: Oxides and hydroxides	1	115	Japan 112; United Kingdom 2.
Cobalt: Oxides and hydroxides ..... value	$5,000	$11,161	All from Japan.
Copper:			
Oxides and hydroxides	NA	123	Belgium-Luxembourg 122; West Germany 1.
Sulfate	NA	130	United Kingdom 118; Yugoslavia 20.
Metal including alloys, semimanufactures	7,717	[3]1,774	Japan 845; Spain 93; Argentina 52.
Gold: Metal including alloys, unwrought and partly wrought ..... value, thousands	$550	$472	Spain $357; West Germany $115.
Iron and steel:			
Iron ore and concentrate excluding roasted pyrite	479	500	All from Netherlands.
Metal:			
Scrap	99,188	88,786	All from U.S.S.R.
Pig iron, cast iron, related materials	120	115	West Germany 114; Spain 1.
Ferroalloys:			
Ferrochromium	NA	5	All from France.
Ferromanganese	1,899	1,848	Japan 1,313; Spain 35.
Unspecified	NA	5	All from Spain.
Steel, primary forms	972	334	Spain 321; Austria 3.
Semimanufactures:			
Bars, rods, angles, shapes, sections	51,764	10,715	Poland 4,236; Spain 2,991; Hungary 1,567.
Universals, plates, sheets[4]	936,837	897,125	U.S.S.R. 639,919; Bulgaria 51,152; Spain 20,649.
Hoop and strip	1,682	617	Japan 326; West Germany 216; Spain 60.
Rails and accessories	NA	199	All from France.
Wire	11,305	5,081	Argentina 1,842; Spain 1,479; United Kingdom 795.
Tubes, pipes, fittings[5]	99,907	97,281	U.S.S.R. 49,964; Bulgaria 15,179; Japan 6,063.
Castings and forgings, rough[3]	297,994	284,219	NA.
Lead:			
Oxides	788	286	All from France.
Metal including alloys:			
Unwrought	4,197	104	Belgium-Luxembourg 102; Netherlands 2.
Semimanufactures	629	476	Belgium-Luxembourg 428; Japan 48.
Magnesium: Metal including alloys:			
Unwrought	21	NA	
Semimanufactures	5	5	Spain 2; United Kingdom 1.
Manganese:			
Ore and concentrate	481	302	All from Netherlands.
Oxides	280	200	All from Japan.
Metal including alloys, all forms	16	2	All from Spain.
Mercury ..... 76-pound flasks	NA	116	Netherlands 97; United Kingdom 19.
Nickel:			
Oxides and hydroxides	NA	33	All from Italy.
Metal including alloys:			
Unwrought	2	2	All from Netherlands.
Semimanufactures	15	26	Japan 12; Canada 7; West Germany 6.
Platinum-group metals: Metals including alloys, unwrought and partly wrought ..... value, thousands	$37	$145	France $59; West Germany $37; Spain $16.
Silver: Metal including alloys, unwrought and partly wrought ..... do.	$706	$290	West Germany $162; Spain $110; Japan $17.
Tin: Metal including alloys:			
Unwrought	351	21	Mainly from United Kingdom.
Semimanufactures	2	1	All from Spain.
Titanium:			
Ore and concentrate	NA	123	Do.
Oxides	197	68	West Germany 67; United Kingdom 1.
Metal including alloys, all forms	NA	3	All from Japan.
Tungsten: Metal including alloys, all forms ..... value, thousands	$18	$123	Do.

See footnotes at end of table.

Table 2.—Cuba: Apparent imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Principal sources, 1986
METALS —Continued			
Zinc:			
Ore and concentrate	38	NA	
Oxides	450	372	Argentina 209; United Kingdom 163.
Blue powder	1	NA	
Metal including alloys:			
Unwrought	1,884	117	All from Japan.
Semimanufactures	109	331	Japan 293; Netherlands 38.
Other:			
Ores and concentrates	3	30	West Germany 18; Spain 12.
Oxides and hydroxides	33	NA	
Base metals including alloys, all forms	4	NA	
INDUSTRIAL MINERALS			
Abrasives, n.e.s.:			
Natural: Corundum, emery, pumice, etc.	50	50	All from Italy.
Artificial: Corundum	76	126	All from West Germany.
Dust and powder of precious and semiprecious stones	$11	NA	
Grinding and polishing wheels and stones	211	228	Austria 205; Spain 9; Yugoslavia 4.
Asbestos, crude	1,659	2,374	All from Canada.
Boron materials: Oxides and acids	2	151	All from Argentina.
Cement	49,062	14,081	U.S.S.R. 13,000; United Kingdom 855; Japan 114.
Clays, crude:			
Bentonite	572	N/.	
Chamotte earth	40	NA	
Kaolin	2,793	120	United Kingdom 85; Belgium-Luxembourg 35.
Unspecified	105	145	Spain 127; West Germany 18.
Diatomite and other infusorial earth	4	1	All from West Germany.
Feldspar, fluorspar, related materials	80	NA	
Fertilizer materials: Manufactured:			
Ammonia	$29,407	$36,000	NA.
Nitrogenous	$626,150	$607,000	U.S.S.R. 576,000; West Germany 5.
Phosphatic (total)	295,466	348,515	U.S.S.R. 312,000; Tunisia 36,515.
Of which:			
Superphosphate, simple[3]	255,466	299,000	NA.
Superphosphate, triple[3]	40,000	37,000	NA.
Unspecified	NA	12,515	NA.
Potassic (total)	414,874	385,000	U.S.S.R. 232,000; West Germany 27.
Of which:			
Potassium chloride[3]	390,593	367,000	NA.
Potassium sulfate[3]	24,281	18,000	NA.
Unspecified and mixed	534	NA	
Fluorspar	134	NA	
Graphite, natural	512	162	Japan 160; Spain 2.
Gypsum and plaster	147	457	United Kingdom 357; West Germany 100.
Iodine	NA	4	Netherlands 3; Spain 1.
Lime	NA	4	All from Japan.
Magnesium compounds:			
Magnesite, crude	NA	243	Austria 242; West Germany 1.
Oxides and hydroxides	52	NA	
Mica:			
Crude including splittings and waste	339	140	France 108; Spain 21; Argentina 11.
Worked including agglomerated splittings	1	6	Japan 4; Italy 1; United Kingdom 1.
Phosphates, crude	10,000	NA	
Phosphorus, elemental	NA	12	All from Japan.
Pigments, mineral:			
Natural, crude	NA	1	All from West Germany.
Iron oxides and hydroxides, processed	569	283	Spain 184; Japan 99.
Precious and semiprecious stones other than diamond:			
Natural	$400	NA	
Synthetic	$25,000	$57,908	Japan $27,908; Switzerland $23,000; Austria $7,000.
Salt and brine	66	124	West Germany 114; United Kingdom 10.
Sodium compounds, n.e.s.:			
Carbonate, manufactured	6,858	5,010	France 5,001; West Germany 9.
Sulfate, manufactured	1,084	NA	

See footnotes at end of table.

Table 5.—Cuba: Apparent imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity		1985	1986[p]	Principal sources, 1986
INDUSTRIAL MINERALS —Continued				
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked		2	151	Spain 150; Italy 1.
Worked		NA	12	Italy 6; Spain 6.
Gravel and crushed rock		NA	135	All from France.
Quartz and quartzite		47	8	All from West Germany.
Sand other than metal-bearing		2	103	Yugoslavia 102; West Germany 1.
Sulfur:				
Elemental, all forms		[2]157,061	[2]124,535	Canada 61,616.
Sulfuric acid		87	14	All from United Kingdom.
Talc, steatite, soapstone, pyrophyllite		57	NA	
Other: Crude		453	281	Spain 280; West Germany 1.
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural		8	8	All from Spain.
Carbon black		4,980	196	West Germany 139; United Kingdom 52; Japan 5.
Coal:				
Anthracite		[2]89,718	[2]83,113	Japan 200.
All other grades including briquets		1,300	NA	
Coke and semicoke		[2]63,849	[2]62,263	Japan 27.
Peat including briquets and litter		144	283	West Germany 282; Canada 1.
Petroleum:				
Crude	thousand 42-gallon barrels	[2]58,736	NA	
Refinery products:				
Liquefied petroleum gas	42-gallon barrels	NA	12	All from West Germany.
Gasoline, motor	do.	[2]3,267,154	215,009	Canada 214,481; United Kingdom 366; West Germany 162.
Mineral jelly and wax	do.	162	4,295	Japan 3,738; Netherlands 409; United Kingdom 142.
Kerosene and jet fuel	do.	83	113,871	Spain 67,255; Netherlands 46,500; Yugoslavia 116.
Distillate fuel oil	do.	[2]25,519,302	84,989	Canada 84,581; Yugoslavia 336; West Germany 15.
Lubricants	do.	[2]758,758	[2]197,100	Italy 57,680; Netherlands 57,197; Spain 39,901.
Nonlubricating oils	do.	28	79	All from Japan.
Residual fuel oil	do.	[2]8,733,251	199,707	All from Spain.
Bitumen and other residues	do.	127	NA	
Bituminous mixtures	do.	1,369	431	United Kingdom 261; Spain 158; Yugoslavia 6.
Petroleum coke	do.	110	127	All from West Germany.

[p]Preliminary. NA Not available.

[1]Table prepared by H. D. Willis. Owing to a lack of official trade data published by Cuba, this table should not be taken as a complete presentation of this country's mineral trade. Unless otherwise specified, these data have been compiled from United Nations information and data published by the trading partner countries. The United States reported no trade in mineral commodities with Cuba in 1985 or 1986.

[2]Anuario Estadistico de Cuba, 1986.

Another marble complex was under construction in San Francisco, Granma Province. Designed to be Cuba's largest, it was scheduled for completion in the 1986-90 plan period. At full capacity, the new plant would exceed the combined capacity of the Mariel and Nueva Gerona plants. About 90% of the plant's production was to be exported, mostly to hard-currency markets. The Granma area has been producing marble since the 1950's.

Testing was begun at the Combine Two complex of the new oil refinery in Santiago. The test included the processing of crude to produce naphtha, diesel oil, kerosene, fuel oil, oil tar, and other products. The Combine Two complex was scheduled for completion during the first half of 1988.

To ensure adequate fuel supply to the country, Cuba was planning to construct, with Soviet assistance, a 200-kilometer pipeline from the new oil terminal in Matanzas, east of Havana, to the new oil refinery in Cienfuegos. The project includes building a school to train workers who will operate and maintain the pipeline. The schedule calls for construction of branch pipelines and fuel storage warehouses to be built by 1990. The 1987 plans included the completion of 66 kilometers of pipeline to carry fuel oil to the thermoelectric plants in Matanzas and Santa Cruz del Norte and Cuban crude oil from Varadero to the Port of Cárdenas.

DOMINICAN REPUBLIC[a]

The Dominican Republic has known mineral deposits of bauxite, coal, copper, gold, gypsum, iron ore, limestone, marble, nickel, and silver. Titanium sands have been found in various places on the sea coasts. Cobalt, molybdenum, and other minerals have been found in small quantities. Mining activity in the Dominican Republic continued to be centered around gold and nickel.

To encourage foreign investment in the mining industry, the Government of the Dominican Republic enacted Decree No. 13-87 in January 1987, replacing all previous decrees that had set aside national mineral reserves areas that contain base metals, gold, silver, and others. Previously, the national reserves could be explored by private companies but developed only by the Government or with special contracts. Those policies had produced a negative impact on the industry by almost paralyzing mineral exploration by private companies. The new 1987 decree opened most of the territory to exploration by private domestic companies and foreign companies by opening up most of the national reserves. The greater part of the country will be governed by the 1971 Mining Law No. 146, which provides for prospecting, exploration, development, and exploitation of mineral deposits in the Dominican Republic. The new decree maintains only four national reserves: Sabaneta, 55,700 hectares; Pueblo Viejo Extension, 46,000 hectares; Neita, 25,200 hectares; and La Cuaba, 2,100 hectares. Reportedly, because of the new mining policies, companies from Australia, Canada, Japan, and the United States indicated interest, primarily exploring for precious metals.

Relative to 1986, the economy of the Dominican Republic grew at a rate of 8% in 1987. Construction led the growth with a 46% increase, followed by mining with 16%. Growth in the value of mineral output was attributed to increases in prices rather than increased production. Economic growth was accompanied by a sharp increase in imports. According to the Central Bank, inflation increased by 25%, leading to a peso depreciation of 38%. As a consequence, the Government imposed strict exchange control in June, which was then removed in November.

Gold production in 1987 from the Pueblo Viejo Mine, operated by Rosario Dominicana S.A., was 246,400 troy ounces. This output from the oxide ore zone was expected to decrease further in 1988 and to cease because of total depletion in 1990. The other two ore zones, transition and sulfide, reportedly contain 400,000 and 10,000,000 ounces of gold, respectively. In 1987, the mine's board of directors approved funds to develop the transition ore zone but Government approval had not been granted at yearend. Canyon Resources Inc., a U.S. company, found commercially exploitable gold deposits near the Pueblo Viejo Mine.

Mitsubishi Corp. was interested in forming a joint venture with Rosario Dominicana to develop the Loma de la Nandina gold prospect. Mitsubishi previously had been involved in gold exploration in the Dominican Republic.

According to the 1987 report of Falconbridge Dominicana, production of nickel in ferronickel reached a record-high level of 32,521. The company reported net earnings of $13.4 million[a] after suffering a net loss of $2.2 million in 1986 and attributed the improved earnings to high production rates and improved nickel prices.

In November, the Government issued decree No. 578-87 establishing export duties on sugar and minerals, including ferronickel, to be imposed when the official foreign exchange rate exceeds RD$4.00 to US$1.00. At yearend, according to Falconbridge Dominicana's annual report, the application of this rule represented a duty of 20% of the value of ferronickel shipped during this year. Falconbridge Dominicana argued that its Supplementary Agreement of 1969 with the Government could not be unilaterally amended by Presidential decree and made no payment of duties, suspending shipments in December.

The Dirección General de Minas reopened the Cabo Rojo Mine during the year. Ideal Dominicana S.A. managed this bauxite mine for the Government, which produced 211,000 tons and exported 285,700 tons including bauxite from the Aluminum Co. of America (Alcoa) stockpile. Production was sold to Alcoa, the mine operator from 1959 to 1983.

Table 4.—Dominican Republic: Imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1984	1985	Sources, 1985: United States	Sources, 1985: Other (principal)
METALS				
Aluminum:				
Oxides and hydroxides	99	65	10	Brazil 37; West Germany 18.
Metal including alloys:				
Scrap	41	--	--	
Unwrought	1,350	1,010	969	Canada 41.
Semimanufactures	1,624	2,454	543	Spain 814; West Germany 516.
Arsenic: Oxides and acids	26	--	--	
Chromium: Oxides and hydroxides	2	3	--	All from West Germany.
Cobalt: Oxides and hydroxides	1	1	--	All from United Kingdom.
Copper: Metal including alloys:				
Unwrought	50	2	2	
Semimanufactures	1,253	1,250	943	Canada 147; Chile 117.
Iron and steel:				
Iron ore and concentrate:				
Excluding roasted pyrite	--	34	34	
Pyrite, roasted	--	2	2	
Metal:				
Scrap	50,372	20,971	18,497	Netherlands Antilles 1,628; Haiti 545.
Pig iron, cast iron, related materials	56	199	--	Japan 98; Brazil 2.
Ferroalloys:				
Ferromanganese	85	321	71	Brazil 250.
Unspecified	941	748	--	Brazil 691; Canada 53; Japan 4.
Steel, primary forms	49,574	11,632	52	Venezuela 9,895; Republic of Korea 1,015; Spain 349.
Semimanufactures:				
Bars, rods, angles, shapes, sections	13,229	15,776	515	Republic of South Africa 4,355; Brazil 1,844; West Germany 1,820.
Universals, plates, sheets	43,661	37,788	5,518	Japan 7,691; West Germany 5,530.
Hoop and strip	567	301	119	Netherlands 57; West Germany 47.
Rails and accessories	131	371	169	United Kingdom 580; Suriname 121.
Wire	607	2,676	69	West Germany 1,848; Belgium-Luxembourg 326; Japan 190.
Tubes, pipes, fittings	1,942	2,132	965	Japan 407; Republic of Korea 317.
Castings and forgings, rough	159	230	98	Spain 44; Belgium-Luxembourg 30.
Lead:				
Ore and concentrate	1	--	--	
Oxides	652	793	9	Mexico 784.
Metal including alloys:				
Scrap	--	1	1	
Unwrought	57	35	35	
Semimanufactures	1	2	1	West Germany 1.
Magnesium: Metal including alloys, unwrought	--	21	--	All from France.
Manganese:				
Ore and concentrate	527	452	84	Mexico 209; Belgium-Luxembourg 120.
Oxides	24	91	7	Belgium-Luxembourg 70; West Germany 12.
Mercury 76-pound flasks	--	4	(2)	Mainly from West Germany.
Molybdenum: Metal including alloys, all forms value, thousands	--	$3	$3	
Nickel:				
Matte and speiss	--	1	1	
Metal including alloys, semimanufactures	1	3	1	Unspecified 2.
Rare-earth metals including alloys, all forms	474	2,608	1,960	Brazil 330; France 162.
Silver:				
Metal including alloys, unwrought and partly wrought value, thousands	$75	$30	$30	
Tin:				
Oxides	10	--		
Metal including alloys:				
Scrap	29	--		
Unwrought	25	19	14	Unspecified 5.
Semimanufactures	17	53	41	West Germany 10.
Titanium: Oxides	980	902	785	West Germany 97; France 10.

See footnotes at end of table.

Table 6.—Dominican Republic: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1984	1985	Sources, 1985	
			United States	Other (principal)
METALS —Continued				
Tungsten: Metal including alloys, all forms	(2)	5	5	
Zinc:				
Oxides	154	124	47	West Germany 46; Netherlands 24.
Blue powder	51	89	24	Mexico 65.
Metal including alloys:				
Scrap	--	50	--	All from Canada.
Unwrought	1,047	1,434	304	Mexico 658; Canada 433.
Semimanufactures	98	136	18	Spain 96; Canada 22.
Other:				
Ores and concentrates	9	97	38	Mexico 59.
Oxides and hydroxides	110	59	48	West Germany 6; Belgium-Luxembourg 5.
Ashes and residues	2	14	14	
Base metals including alloys, all forms	16	18	4	Belgium-Luxembourg 8; West Germany 4.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc	203	188	150	West Germany 13; Brazil 9.
Artificial: Corundum	--	23	--	All from Brazil.
Grinding and polishing wheels and stones	104	114	27	Brazil 35; Spain 23.
Asbestos, crude	462	641	20	Canada 621.
Barite and witherite				
value, thousands	--	$24	$10	West Germany $14.
Boron materials:				
Crude natural borates	15	53	53	
Oxides and acids	23	93	67	West Germany 25; Spain 1.
Cement	7,999	11,031	65	Spain 8,405; Mexico 1,721; Republic of Korea 800.
Chalk	238	30	30	
Clays, crude	2,099	2,798	2,153	United Kingdom 590; West Germany 51.
Diatomite and other infusorial earth	587	648	570	Mexico 78.
Feldspar, fluorspar, related materials	1,946	2,190	1,690	Canada 500.
Fertilizer materials:				
Crude, n.e.s	41	3	3	
Manufactured:				
Ammonia	74	149	129	West Germany 14; Netherlands 5.
Nitrogenous	44,143	65,962	58,864	Trinidad and Tobago 6,778; West Germany 276.
Phosphatic	17,000	8,921	8,921	
Potassic	18,517	11,534	11,256	Jamaica 227; West Germany 47.
Unspecified and mixed	31,779	25,217	24,692	Israel 500; West Germany 19.
Graphite, natural	227	106	106	
Gypsum and plaster	73	93	17	Spain 57; West Germany 18.
Magnesite, crude	143	6	--	Italy 4; West Germany 2.
Mica:				
Crude including splittings and waste	--	21	21	
Worked including agglomerated splittings	14	26	7	Japan 6.
Nitrates, crude	--	3	3	
Phosphates, crude	--	52	52	
Pigments, mineral:				
Natural, crude	159	181	8	Belgium-Luxembourg 135; West Germany 17; Hong Kong 11.
Iron oxides and hydroxides, processed	47	88	6	West Germany 68; United Kingdom 13.
Potassium salts, crude	1	--	--	
Pyrite, unroasted	--	217	--	All from Mexico.
Salt and brine	85	144	126	West Germany 7; Spain 1.
Sodium compounds, n.e.s.:				
Carbonate, manufactured	1,264	1,483	23	West Germany 700; Belgium-Luxembourg 362; France 286.
Sulfate, manufactured	26,731	9,606	4,433	Colombia 1,639; Jamaica 1,205.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked				
value, thousands	--	$1	$1	
Worked	--	4	3	Italy 1.
Gravel and crushed rock	40	(2)	(2)	
Quartz and quartzite	25	101	98	NA.
Sand other than metal-bearing	793	798	792	Canada 6.

See footnotes at end of table.

Table 6.—Dominican Republic: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1986	1987	Sources, 1985: United States	Sources, 1985: Other (principal)
INDUSTRIAL MINERALS —Continued				
Sulfur:				
Elemental:				
Crude including native and byproduct	27	1,369	1,369	West Germany 6.
Colloidal, precipitated, sublimed	542	67	67	
Dioxide value, thousands	--	$1	$1	
Sulfuric acid	197	97	97	
Nat. sulfide, sulphites, pyrophyllite	1,384	959	739	Italy 75; Spain 32.
Other:				
Crude	14	17	7	United Kingdom 10.
Slag and dross, not metal-bearing	--	2	2	
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	1,422	--		
Carbon:				
Carbon black	128	94	19	West Germany 51; Belgium-Luxembourg 24.
Gas carbon	142	39,950	20	Venezuela 24,790; Colombia 14,630.
Coal: All grades excluding briquets value, thousands	$968	$5,901	$42	Colombia $5,085; India $468.
Coke and semicoke	12,879	158	--	All from Colombia.
Petroleum:				
Crude thousand 42-gallon barrels	12,548	12,661	1	Venezuela 8,676; Mexico 3,852; Netherlands Antilles 21.
Refinery products:				
Liquefied petroleum gas do.	104	104	45	Venezuela 353.
Gasoline, motor do.	49	75	3	Venezuela 67; Netherlands Antilles 5.
Mineral jelly and wax do.	25	27	5	Japan 15; West Germany 6.
Kerosene and jet fuel do.	9	10	5	Venezuela 3; Netherlands Antilles 2.
Distillate fuel oil do.	691	186	--	All from Venezuela.
Lubricants do.	102	114	42	Netherlands Antilles 35; Venezuela 33.
Nonlubricating oils do.	1	2	2	
Residual fuel oil do.	9,174	2,610	--	Venezuela 2,605; Panama 5.
Bitumen and other residues do.	60	56	8	Panama 29; Netherlands Antilles 15; Haiti 4.
Bituminous mixtures do.	1	40	2	Panama 38.
Petroleum coke do.	52	69	69	

NA Not available.
[1]Table prepared by H. D. Willis. Export data were not available at time of publication.
[2]Less than 1/2 unit.

GUADELOUPE AND MARTINIQUE

The latest trade data available for Guadeloupe and Martinique are included in the following tables.

Table 7.—Guadeloupe: Exports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Principal destinations, 1986
METALS			
Aluminum: Metal including alloys:			
Scrap	124	85	All to France.
Semimanufactures	17	29	Martinique 28; France 1.
Copper: Metal including alloys:			
Scrap	--	297	France 263; Belgium-Luxembourg 23; West Germany 11.
Semimanufactures	1	1	Mainly to St. Lucia.
Iron and steel: Metal:			
Scrap	134	6	All to Brazil.
Semimanufactures:			
Bars, rods, angles, shapes, sections	129	68	Martinique 33; French Guiana 26.
Universals, plates, sheets	20	15	Martinique 8; Barbados 5; St. Lucia 2.
Wire value, thousands	$2	--	
Tubes, pipes, fittings	29	7	French Guiana 5; Barbados 1; Martinique 1.
Castings and forgings, rough	--	5	All to Martinique.
Lead: Metal including alloys, unwrought	19	--	
Nickel: Metal including alloys, scrap	16	--	
Silver: Metal including alloys, unwrought and partly wrought value, thousands	$1	--	
Zinc: Oxides	--	5	All to Martinique.
INDUSTRIAL MINERALS			
Abrasives, n.e.s.: Natural: Corundum, emery, pumice, etc value, thousands	$4	--	
Cement	13,632	11,586	French Guiana 6,196; Dominica 4,861; Barbados 230.
Fertilizer materials: Manufactured:			
Ammonia	69	51	All to Martinique.
Unspecified and mixed	--	1,120	St. Lucia 850; Grenada 250; French Guiana 20.
Salt and brine	1	(2)	All to French Guiana.
Stone, sand and gravel:			
Gravel and crushed rock	1,551	267	All to Netherlands Antilles.
Sand other than metal-bearing	792	--	
Other: Crude	4	--	
MINERAL FUELS AND RELATED MATERIALS			
Coal: Lignite including briquets	14	--	
Petroleum refinery products:			
Liquefied petroleum gas 42-gallon barrels	35	35	Mainly to St. Lucia.
Gasoline, motor do.	9	1,785	France 1,768; Dominica 9; St. Lucia 8.
Kerosene and jet fuel do.	28,977	109	All to France.
Distillate fuel oil do.	--	2,499	Do.
Lubricants do.	77	63	Martinique 28; French Guiana 21.
Bitumen and other residues do.	--	12	All to Martinique.

[1]Table prepared by H. D. Willis. Guadeloupe did not report any exports of mineral commodities to the United States during 1986.
[2]Less than 1/2 unit.

Table 8.—Guadeloupe: Imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Oxides and hydroxides value, thousands	$3	$3	--	All from France.
Metal including alloys, semimanufactures	482	480	87	France 365; Italy 17.
Chromium: Oxides and hydroxides	1	4	--	All from France.
Copper: Metal including alloys:				
Unwrought	--	1	--	Do.
Semimanufactures	148	165	3	France 159; Finland 1.

See footnotes at end of table.

Table 8.—Guadeloupe: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS —Continued				
Iron and steel: Metal:				
Pig iron, cast iron, related materials	1	21	--	All from France.
Ferroalloys	--	1	--	Do.
Semimanufactures:				
Bars, rods, angles, shapes, sections	13,720	16,111	--	Belgium-Luxembourg 8,060; France 4,504; West Germany 2,207.
Universals, plates, sheets	7,118	11,573	--	France 5,602; Martinique 5,319; Belgium-Luxembourg 652.
Hoop and strip	7	7	--	France 5; Belgium-Luxembourg 2.
Rails and accessories	7	--	--	
Wire	1,389	993	--	France 842; Belgium-Luxembourg 150; Italy 1.
Tubes, pipes, fittings	13,178	9,450	(2)	France 8,740; Spain 611; Belgium-Luxembourg 61.
Castings and forgings, rough	153	146	--	All from France.
Lead:				
Oxides	1	--		
Metal including alloys, semimanufactures	16	18	--	Do.
Mercury value, thousands	$1	$2	--	Do.
Nickel: Metal including alloys, semimanufactures	1	2	--	Mainly from France.
Platinum-group metals: Metals including alloys, unwrought and partly wrought, platinum value, thousands	$5	$3	--	All from France.
Silver:				
Waste and sweepings[3] kilograms	1	--		
Metal including alloys, unwrought and partly wrought value, thousands	$1	--		
Tin: Metal including alloys, semimanufactures	1	1	--	Do.
Titanium: Oxides	19	10	--	Do.
Zinc:				
Oxides	--	1	--	Do.
Metal including alloys, semimanufactures	1	1	--	Do.
Other: Ashes and residues	166	110	--	Do.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc value, thousands	$11	$3	--	Do.
Grinding and polishing wheels and stones	12	18	--	France 11; Switzerland 6; Italy 1.
Asbestos, crude	154	132	--	All from France.
Barite and witherite	14	10	--	Do.
Boron materials: Crude natural borates	--	2	--	Do.
Cement	149,817	137,828	--	France 63,058; Venezuela 43,800; Spain 30,750.
Chalk	580	557	--	All from France.
Clays, crude	81	109	--	United Kingdom 60; France 49.
Diamond: Gem, not set or strung value, thousands	$1	--		
Diatomite and other infusorial earth	36	45	--	All from France.
Fertilizer materials:				
Crude, n.e.s	145	4	--	Do.
Manufactured:				
Ammonia	92	95	--	France 93; Italy 2.
Nitrogenous	2,353	2,600	390	Netherlands 1,921; France 239.
Phosphatic	210	99	--	All from France.
Potassic	120	370	350	Martinique 20.
Unspecified and mixed	19,375	18,819	31	Martinique 10,544; Netherlands 5,430; Belgium-Luxembourg 2,308.
Gypsum and plaster	9,967	10,690	--	Morocco 10,500; France 190.
Lime	549	621	--	France 561; Martinique 60.
Magnesium compounds: Magnesite, crude	126	126	--	All from Netherlands.
Mica:				
Crude including splittings and waste	19	15	--	All from France.
Worked including agglomerated splittings	--	6	--	Do.
Pigments, mineral: Iron oxides and hydroxides, processed	15	20	--	France 15; West Germany 5.

See footnotes at end of table.

Table 8.—Guadeloupe: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Precious and semiprecious stones other than diamond, natural value, thousands	$3	$19	--	All from France.
Salt and brine	2,451	2,294	--	France 1,184; Netherlands 508; West Germany 279.
Sodium compounds, n.e.s.:				
Carbonate, manufactured	1	21	--	All from France.
Sulfate, manufactured	50	49	--	France 39; Netherlands 10.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	1	--	--	
Worked	135	119	--	Italy 61; France 45; Spain 13.
Dolomite, chiefly refractory-grade	499	460	--	All from France.
Gravel and crushed rock	930	709	--	Barbados 520; France 189.
Quartz and quartzite value, thousands	--	$1	--	All from France.
Sand other than metal-bearing	296	1,591	--	Suriname 700; Barbados 599; France 292.
Sulfur:				
Elemental, crude including native and byproduct	1	1	--	All from France.
Sulfuric acid	135	157	--	France 155; West Germany 2.
Talc, steatite, soapstone, pyrophyllite	46	102	--	All from France.
Other:				
Crude	131	145	--	France 129; West Germany 16.
Slag and dross, not metal-bearing	47	124	--	All from France.
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	1	--		
Carbon black	9	10	--	Do.
Coke and semicoke value, thousands	$2	--		
Peat including briquets and litter	NA	31	--	West Germany 20; France 11.
Petroleum:				
Crude value, thousands	--	$1	--	All from France.
Refinery products:				
Liquefied petroleum gas 42-gallon barrels	141,949	164,001	15,985	Netherlands Antilles 57,584; Martinique 41,795.
Gasoline, motor do.	808,087	464,559	--	Netherlands Antilles 239,326; Martinique 164,536; Trinidad and Tobago 58,812.
Mineral jelly and wax do.	401	1,133	--	France 1,086; Belgium-Luxembourg 47.
Kerosene and jet fuel do.	575,244	334,699	--	Netherlands Antilles 207,553; Martinique 46,237; Venezuela 40,835.
Distillate fuel oil do.	528,474	258,690	--	Martinique 196,399; Netherlands Antilles 30,765; Trinidad and Tobago 29,034.
Lubricants do.	36,708	34,790	105	France 27,160; Belgium-Luxembourg 3,780; Jamaica 2,268.
Residual fuel oil do.	404,295	595,351	--	Martinique 575,391; France 19,953.
Bitumen and other residues do.	43,838	39,614	--	Trinidad and Tobago 18,701; Venezuela 12,690; Netherlands Antilles 7,696.
Bituminous mixtures do.	479	200	--	Mainly from France.

NA Not available.
[1]Table prepared by H. D. Willis.
[2]Less than 1/2 unit.
[3]May include other precious metals.

Table 9.—Martinique: Exports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Destinations, 1986	
			United States	Other (principal)
METALS				
Aluminum: Metal including alloys:				
Scrap	42	44	30	France 14.
Semimanufactures	2	1	--	All to Guadeloupe.
Copper: Metal including alloys:				
Scrap	447	404	--	All to France.
Semimanufactures	--	3	--	St. Vincent and Grenadines 2; France 1.
Iron and steel: Metal: Semimanufactures:				
Bars, rods, angles, shapes, sections	429	576	--	Guadeloupe 421; Netherlands Antilles 130; French Guiana 25.
Universals, plates, sheets	1,103	1,242	--	Guadeloupe 1,000; Trinidad and Tobago 145; French Guiana 25.
Hoop and strip	1	--		
Wire	5	--		
Tubes, pipes, fittings	12	15	--	Netherlands Antilles 12; France 2; Guadeloupe 1.
Lead: Metal including alloys, scrap	17	--		
INDUSTRIAL MINERALS				
Cement	19,383	19,557	--	French Guiana 18,951; Guadeloupe 580; Netherlands Antilles 14.
Chalk	80	--		
Clays, crude	11	--		
Fertilizer materials:				
Crude, n.e.s	--	5	--	All to St. Lucia.
Manufactured:				
Nitrogenous	6,413	2,502	--	St. Lucia 1,274; Guadeloupe 798; Guyana 200.
Potassic	391	800	--	Trinidad and Tobago 478; Guadeloupe 320; St Lucia 2.
Unspecified and mixed	31,715	15,845	--	Guadeloupe 8,811; St. Lucia 5,980; French Guiana 604.
Lime	58	444	--	French Guiana 384; Guadeloupe 60.
Magnesium compounds: Magnesite, crude	1	--		
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	10	--		
Worked	3	--		
Dolomite, chiefly refractory-grade	16	--		
Gravel and crushed rock				
value, thousands	--	$2	--	All to France.
Sand other than metal-bearing	--	146	--	Mainly to St. Lucia.
Sulfur:				
Elemental, crude including native and byproduct	1	1	--	All to French Guiana.
Sulfuric acid	--	1	--	All to St. Lucia.
Other: Slag and dross, not metal-bearing	5	--		
MINERAL FUELS AND RELATED MATERALS				
Petroleum refinery products				
Liquefied petroleum gas				
42-gallon barrels	38,350	31,668	--	Mainly to Guadeloupe.
Gasoline, motor ---do---	151,368	180,923	--	All to Guadeloupe.
Kerosene and jet fuel ---do---	70,393	51,290	--	Do.
Distillate fuel oil ---do---	179,174	334,462	--	Do.
Lubricants ---do---	21	77	--	Guadeloupe 70; French Guiana 7.
Residual fuel oil ---do---	165,727	580,502	--	All to Guadeloupe.
Bitumen and other residues ---do---	6	--		

[1]Table prepared by H. D. Willis.

Table 10.—Martinique: Imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Oxides and hydroxides value, thousands	$2	$1	--	All from France.
Metal including alloys, semimanufactures	193	459	231	France 220; Italy 2.
Chromium: Oxides and hydroxides	1	--		
Cobalt: Oxides and hydroxides value, thousands	$1	$1	--	All from France.
Columbium and tantalum: Metal including alloys, all forms, tantalum do.	--	$10	--	Do.
Copper: Metal including alloys:				
Unwrought do.	$2	--		
Semimanufactures	108	135	3	France 127; Austria 5.
Iron and steel: Metal:				
Scrap value, thousands	--	$1	--	All from France.
Pig iron, cast iron, related materials	--	3	--	Do.
Steel, primary forms value, thousands	$1	--		
Semimanufactures:				
Bars, rods, angles, shapes, sections	16,938	16,947	4	Trinidad and Tobago 6,181; Belgium-Luxembourg 5,057; France 3,834.
Universals, plates, sheets	7,898	7,304	--	France 6,959; Belgium-Luxembourg 278; West Germany 34.
Hoop and strip	5	3	--	All from France.
Rails and accessories	4	1	--	Do.
Wire	256	188	(2)	France 131; Belgium-Luxembourg 57.
Tubes, pipes, fittings	4,882	3,463	2	France 2,397; Spain 767; Italy 268.
Castings and forgings, rough	262	199	--	France 182; Belgium-Luxembourg 17.
Lead:				
Oxides	5	--		
Metal including alloys, semimanufactures	3	3	--	All from France.
Nickel: Metal including alloys:				
Unwrought value, thousands	$2	$1	--	All from West Germany.
Semimanufactures	1	1	--	All from France.
Silver: Metal including alloys, unwrought and partly wrought value, thousands	$1	--		
Tin: Metal including alloys:				
Unwrought	$5	--		
Semimanufactures	1	1	--	All from France.
Titanium: Oxides	191	244	--	United Kingdom 166; France 78.
Zinc:				
Oxides	18	17	--	All from France.
Metal including alloys:				
Unwrought	1	--		
Semimanufactures	2	7	--	Do.
Other:				
Ashes and residues	169	285	--	Do.
Base metals including alloys, all forms value, thousands	$1	--		
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc	5	8	--	Do.
Artificial: Corundum	2	1	--	Do.
Grinding and polishing wheels and stones	34	27	(2)	France 20; Italy 6.
Asbestos, crude	61	107	--	All from Italy.
Barite and witherite	2	--		
Boron materials:				
Crude natural borates	161	20	--	Turkey 16; France 4.
Oxides and acids value, thousands	--	$1	--	All from France.
Cement	129,518	134,545	--	France 66,575; Venezuela 52,970; Spain 15,000.
Chalk	573	672	--	All from France.
Clays, crude	75	392	--	France 379; United Kingdom 13.
Diamond: Gem, not set or strung value, thousands	$13	$2	--	All from France.
Diatomite and other infusorial earth	9	17	--	Do.

See footnotes at end of table.

Table 10.—Martinique: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Fertilizer materials:				
Crude, n.e.s	109	281	--	All from France.
Manufactured:				
Ammonia	82	72	--	Guadeloupe 60; France 12.
Nitrogenous	19,551	12,718	3,600	Netherlands 5,758; East Germany 2,497.
Phosphatic	72	118	--	France 108; Belgium-Luxembourg 10.
Potassic	19,854	20,033	9,372	East Germany 10,080; Belgium-Luxembourg 496.
Unspecified and mixed	20,807	31,790	708	Norway 21,328; Belgium-Luxembourg 6,006; France 2,866.
Graphite, natural	--	1	--	All from France.
Gypsum and plaster	8,257	9,749	--	Morocco 9,500; France 236; Spain 13.
Lime	205	201	--	All from France.
Magnesium compounds: Magnesite, crude	390	342	--	All from Greece.
Mica: Worked including agglomerated splittings	6	--	--	
Nitrates, crude	--	7	--	All from France
Pigments, mineral: Iron oxides and hydroxides, processed	10	23	--	France 18; West Germany 5.
Precious and semiprecious stones other than diamond:				
Natural value, thousands	$16	$16	--	All from France.
Synthetic do.	--	$3	--	Do.
Salt and brine	2,973	2,532	--	West Germany 1,400; France 727; United Kingdom 317.
Sodium compounds, n.e.s.:				
Carbonate, manufactured	34	13	--	All from France.
Sulfate, manufactured	203	905	--	Do.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	2	17	--	Do.
Worked	172	204	--	Italy 122; France 64; Portugal 12.
Dolomite, chiefly refractory-grade	1,260	680	--	All from France.
Gravel and crushed rock	4	5	--	Do.
Quartz and quartzite	1	8	--	Do.
Sand other than metal-bearing	38	29	--	Do.
Sulfur:				
Elemental:				
Crude including native and by-product	14	3	--	Do.
Colloidal, precipitated, sublimed	13	5	--	All from United Kingdom.
Sulfuric acid	219	251	--	France 199; West Germany 21; Netherlands 21.
Talc, steatite, soapstone, pyrophyllite	91	48	--	All from France.
Other:				
Crude	368	148	--	France 100; Belgium-Luxembourg 46.
Slag and dross, not metal-bearing	378	129	--	All from France.
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	6	60	--	Mainly from France.
Carbon black	--	1	--	All from France.
Coal: Briquets of anthracite and bituminous coal	5	--	--	
Coke and semicoke	--	1	--	Do.
Peat including briquets and litter	18	37	--	Mainly from West Germany.
Petroleum:				
Crude thousand 42-gallon barrels	1,817	3,005	--	United Kingdom 2,371; United Arab Emirates 634.
Refinery products:				
Liquefied petroleum gas 42-gallon barrels	12,690	31,912	--	Venezuela 14,604; United Kingdom 7,076; Trinidad and Tobago 6,581.
Gasoline, motor do.	55,403	38,514	--	Netherlands Antilles 24,634; France 13,880.
Mineral jelly and wax do.	3,069	2,337	--	All from France.
Kerosene and jet fuel do.	79,135	47,903	--	Netherlands Antilles 28,621; Trinidad and Tobago 19,282.
Distillate fuel oil do.	25,274	3,760	--	All from Trinidad and Tobago.
Lubricants do.	1,437,268	342,694	336	Venezuela 313,054; France 20,749; Belgium-Luxembourg 5,082.
Bitumen and other residues do.	40,135	37,693	--	Trinidad and Tobago 15,077; Netherlands Antilles 11,223; Venezuela 10,490.
Bituminous mixtures do.	964	255	24	France 224; Italy 6.

[1]Table prepared by H. D. Willis.
[2]Less than 1/2 unit.

HAITI[10]

The three-member provisional Government Conseil National de Gouvernement (CNG), established in February 1986, was in place throughout 1987. The CNG announced its intention to have full democratic elections, and full civil liberties were instituted. A new Constitution was ratified in March 1987. However, because of demonstrations, political unrest, civil disorders, and violence, elections scheduled for November had to be postponed.

Haiti, with a variety of mineral resources, including bauxite, copper, gold, iron ore, silver, sulfur, and tin, continued to be underexplored and underdeveloped. During the current decade, the northern part of the country has been explored by international geologists, mining companies, and organizations. Reportedly, the Bureau des Mines et de l'Energie was negotiating with two U.S. companies, AMAX Inc. and Coca Mines Inc. as well as with a domestic company, Gedsa S.A., for the exploitation of the gold-silver deposit in the Grand Bois area, 200 miles north of Port-au-Prince. The ore body covers 10 hectares and is in excess of 20 meters thick. Preliminary ore reserves were estimated at 3.7 million tons with 2.6 grams of gold per ton and 13 grams of silver per ton.

In the Milot area, a gold-bearing ore was found in Morne Bossa. In 1987, 2 million tons of ore averaging 2.25 grams of gold per ton was identified. La Géominérale d'Haiti S.A. continued to study joint-venture proposals from foreign companies for gold exploration and exploitation in the recently studied areas with potential.

The Governments of Haiti and the Dominican Republic were carrying out geological investigations throughout the island of Hispaniola and formed working groups to plan new geological maps for the island. The areas of investigation in Haiti were the Massif de la Selle, Massif du Trou d'Eau, Plateau Central, and Massif du Nord. The areas of investigation in the Dominican Republic were Sierra del Baboruco, Sierra de Neyba, Valle de San Juan, and the Cordillera Central.

Haiti was studying the possibility of increasing the development of its marble industry, mainly for export to the United States and Europe. Haiti has 22 open pit quarries. Further development of marble in Haiti appeared promising and could bring much needed foreign exchange to the country.

The Direction Promotion des Investissements (Prominex), the joint private-public sector entity funded by the U.S. Agency for International Development, continued to search for partners to develop the sea salt refinery at the mouth of Artibonite River. Production from the project would be for local consumption. The $200,000[11] project would refine salt through carbonization, filtration, and crystallization.

The United States continued to be Haiti's main trading partner. Haiti's goods also reached Belgium, Canada, France, the Federal Republic of Germany, Italy, and the Netherlands. Haiti's imports were mainly from the United States, followed by Canada and Japan.

JAMAICA[12]

Imports in 1987 increased significantly. The increase was attributed to strong economic growth caused by expanding construction, manufacturing, and tourism industries. The economy grew at about 5% relative to that of 1986. Exports also increased but at a lower rate than that of imports. The inflation rate was less than that of 1986 and the unemployment rate was estimated at 21%, the lowest in recent years. As of June, the national external debt was $3.64 billion.[13] During the year, the Government of Jamaica was able to reschedule payment of over $500 million of the total.

The International Monetary Fund (IMF) announced early in the year that it would provide a $51.5 million loan to Jamaica to compensate for weak earnings for alumina and bauxite exports during the fiscal year ending in September 1986. The loan from the IMF's Compensatory Financing Facility, to be paid back in 3 years, was part of the $159 million loan package of economic aid to Jamaica.

Production of bauxite increased in 1987 and Jamaica maintained its position as the third largest producer in the world after Australia and Guinea. Both alumina producers in Jamaica, the Aluminium Co. of Canada Ltd. (Alcan) and the Government-owned Clarendon Alumina Production Ltd.,

which was leasing the Alcoa refinery at Nain, increased production in 1987.

Alcan and Jamaica were unable to resolve the longstanding dispute over production levels of their jointly owned alumina refineries in Kirkvine and Ewarton; therefore, they agreed to have a British court settle the dispute through arbitration. The hearings began in November. One of the issues to be resolved was the Government's right to force Alcan, the majority partner, to increase its production to full capacity. Under the joint-venture company, Jamalcan, the Government only has a 7% stake in Alcan's mining and refining operations in Jamaica. Another issue to be resolved by arbitration was whether Alcan had to sell its excess output to the Government at its production cost.

Since 1986, the Government had been trying to negotiate with Alcan to increase its production of the two plants' combined 1.1-million-ton production capacity, offering to purchase any excess alumina produced at Government-determined prices (based on cost of production). Jamaica would then resell the alumina to its own markets developed worldwide. Alcan claimed that its refusal to enter into the agreement derived from its view that increased production would result in increases in production costs, that Jamaica's subsequent resale would increase Alcan's competition and depress alumina prices, and that the company had to reserve the right to fix the price at which to sell the excess alumina to Jamaica.

In December, the British court decided on the case. The court determined that the Government of Jamaica had no right under the 1978 joint-venture contractual agreement to require Alcan to increase its production to full capacity or to sell its excess production to the Government at production costs.

Alcoa, after leasing the Clarendon refinery to the Government of Jamaica in 1985, exercised its right in 1987 to resume operations by reactivating the joint-venture company Jamalco. Alcoa announced that it would resume full operational and commercial activities by February 1988. Alcoa, under the joint-venture agreement, owns 94% equity and the Government of Jamaica owns the remainder through Jamaica Bauxite Mining Ltd. Since March 1987, the Government had been negotiating with Alcoa to purchase the plant, but in September Alcoa decided not to sell.

Kaiser Jamaica Bauxite Co., the island's sole exporter of crude bauxite, obtained a contract during the year to supply 1 million tons to Reynolds Metals Co. of the United States. This stimulated an increase in bauxite production. However, the contract ended in December with no indication that it would be extended or renewed.

Jamaica, through Kaiser Jamaica, continued to supply 1 million tons of bauxite per year to the U.S.S.R. under a 7-year contract due to expire in 1990. However, reports indicated that the Government was interested in renegotiating the contract terms, including increasing exports to the Soviet Union to 1.5 million tons.

At yearend 1987, the Government canceled the 40-year bauxite mining lease of Alumina Partners of Jamaica (Alpart) signed in 1980. Alpart is owned by Kaiser Jamaica and Reynolds Metals (50% each). Alpart's 1.2-million-ton-per-year alumina plant was closed in August 1985 and remained closed throughout 1986 and 1987. Under the Mining Act, the Minister of Mining and Energy is given the authority to cancel a plant's lease if that plant is inactive for a period of 6 months.

Jamaica and Mexico were considering the feasibility of a joint venture to construct an aluminum facility based on Jamaican bauxite. A study group representing both countries was formed. The study's scope was to consider involvement of private companies from both countries and the terms of their participation in the joint venture. Later in the year, the Government of Jamaica announced that the proje[illegible]ed on shared equity by [illegible] and the private co[illegible]. The announcement indicated that bauxite would be mined and conver[illegible] alumina in Jamaica and later sent to Mexico for smelting into aluminum to take advantage of Mexico's abundant low-cost energy.

This was the second multinational aluminum-related proposal. The first proposal involved a joint venture among Jamaica, Mexico, and Venezuela to build a 600,000-ton alumina refinery in Jamaica. The refinery was to be fueled with Mexican and Venezuelan oil, and the alumina was to be smelted into aluminum either in Mexico or Venezuela. In mid-1970, the plan was canceled.

In December 1987, the Governments of China and Jamaica signed a technical assistance agreement by which the two countries would share expertise in the mining of bauxite and the production of alumina.

According to reports, Chinese technicians would be trained at the Jamaica Bauxite Institute's pilot alumina plant while Jamaican officials, using Chinese technology, would attempt to recover rare chemicals from bauxite waste.

The Government, in conformance with its policy of reducing the state's involvement in the economy, continued its divestment program after privatizing the National Commercial Bank in December 1986. In June 1987, it sold its majority ownership of the Caribbean Cement Co., and 10% of the company was sold to Scandinavian Cement Co. (SCANCEM). Under the sales agreement SCANCEM, a joint venture between the Norwegian Cement Co. and the Euroc Group from Sweden, was also to provide technical assistance and exports for Caribbean Cement. During the year, Caribbean Cement was being expanded to double its production capacity to 800,000 tons per year, and its power supply was being converted from oil to coal.

Table 11.—Jamaica: Exports and reexports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Destinations, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Ore and concentrate thousand tons	2,325	2,940	2,119	U.S.S.R. 821.
Oxides and hydroxides do.	1,620	1,580	169	Canada 642; Netherlands 308; United Kingdom 225.
Metal including alloys:				
Scrap	526	360	309	Netherlands 29; United Kingdom 18.
Unwrought	14	--	--	
Semimanufactures	354	234	6	Trinidad and Tobago 188; Dominica 13; Belize 11.
Copper: Metal including alloys:				
Scrap	354	269	137	West Germany 65; East Germany 59.
Semimanufactures value	$36	$276	--	All to Antigua and Barbuda.
Iron and steel: Metal:				
Scrap	1,544	291	165	Canada 126.
Pig iron, cast iron, related materials	--	25	--	All to Turks and Caicos Islands.
Semimanufactures:				
Bars, rods, angles, shapes, sections	20	89	(2)	Cayman Islands 86; Turks and Caicos Islands 3.
Universals, plates, sheets	1,250	3,094	280	Trinidad and Tobago 2,349; St. Lucia 201.
Wire	13	--	--	
Tubes, pipes, fittings	153	9	--	All to St. Vincent and the Grenadines.
Silver: Metal including alloys, unwrought and partly wrought value	--	$256	$256	
Tin: Metal including alloys:				
Scrap	608	406	406	
Semimanufactures	22	--	--	
Titanium: Oxides	--	11	--	Trinidad and Tobago 10; Haiti 1.
Zinc: Metal including alloys:				
Scrap	16	--	--	
Semimanufactures kilograms	--	210	--	NA.
Other:				
Oxides and hydroxides do.	--	300	--	All to Trinidad and Tobago.
Ashes and residues	--	73	73	
Base metals including alloys, all forms	--	79	68	West Germany 11.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.: Grinding and polishing wheels and stones kilograms	--	15	--	All to Cayman Islands.
Cement	3,021	4,248	41	Haiti 1,783; Turks and Caicos Islands 1,353; Barbados 1,071.
Chalk	1	5	--	All to St. Lucia.
Fertilizer materials:				
Crude, n.e.s	38	--		
Manufactured:				
Ammonia	2	1	--	NA.
Unspecified and mixed	--	38	--	All to Cayman Islands.
Gypsum and plaster	160,548	100,143	29,722	Trinidad and Tobago 29,276; Panama 16,924.
Lime	89	36	18	Barbados 18.
Salt and brine	1,925	1,669	94	Trinidad and Tobago 693; Barbados 341; St. Lucia 158.
Sodium compounds, n.e.s.: Carbonate, manufactured kilograms	113	--		

See footnotes at end of table.

Table 11.—Jamaica: Exports and reexports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Destinations, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Stone, sand and gravel:				
Dimension stone, crude and partly worked	5	10	--	All to St. Lucia.
Gravel and crushed rock	33	--	--	
Limestone other than dimension	18	151,912	151,822	NA.
Sand other than metal-bearing	10	--	--	
Sulfuric acid	38	159	38	Trinidad and Tobago 83; Haiti 38.
Talc, steatite, soapstone, pyrophyllite value	$765	--	--	
Other: Crude	--	36	--	All to Cayman Islands.
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	75	--		
Petroleum refinery products:				
Liquefied petroleum gas 42-gallon barrels	1,052	562	--	NA.
Gasoline do.	52,488	28,996	--	Bahamas 14,316; Netherlands Antilles 10,676.
Mineral jelly and wax do.	8	686	633	Belize 2.
Kerosene and jet fuel do.	78,384	2,887	25	Netherlands Antilles 1,906; Bahamas 956.
Distillate fuel oil do.	126,897	64,710	9,535	Bahamas 34,607; Netherlands Antilles 13,630.
Lubricants do.	92,715	106,116	1,253	Guyana 24,616; El Salvador 16,332; Guatemala 14,152.
Residual fuel oil do.	245,919	466,289	459,540	Haiti 5,447.
Bitumen and other residues do.	376	--		

NA Not available.
[1]Table prepared by H. D. Willis.
[2]Less than 1/2 unit.

Table 12.—Jamaica: Imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Ore and concentrate value	$468	--	--	
Oxides and hydroxides	10	1	1	
Metal including alloys:				
Unwrought	860	1,294	175	Canada 955; United Kingdom 100.
Semimanufactures	1,377	893	298	Canada 223; United Kingdom 185.
Chromium: Ore and concentrate	--	18	18	
Copper:				
Sulfate	6	1	(2)	Mainly from Netherlands.
Metal including alloys:				
Unwrought	1	1	(2)	Mainly from Canada.
Semimanufactures	618	615	217	United Kingdom 295; Australia 52.
Gold:				
Waste and sweepings value	$878	$184	--	All from Canada.
Metal including alloys, unwrought and partly wrought troy ounces	1,929	1,672	418	Canada 740; United Kingdom 514.
Iron and steel:				
Iron ore and concentrate including roasted pyrite	19	14	14	
Metal:				
Scrap value	$894	$28,371	--	All from New Zealand.
Pig iron, cast iron, related materials	283	3	3	
Ferroalloys:				
Ferrosilicon	24	23	23	
Unspecified value	--	$1,130	$1,130	
Steel, primary forms	5,686	3,519	132	Trinidad and Tobago 3,037; United Kingdom 190.

See footnotes at end of table.

Table 12.—Jamaica: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS —Continued				
Iron and steel —Continued				
Metal —Continued				
Semimanufactures:				
Bars, rods, angles, shapes, sections	10,645	14,942	663	Trinidad and Tobago 10,727; Taiwan 1,700; United Kingdom 830.
Universals, plates, sheets	13,643	17,744	871	Japan 4,847; United Kingdom 4,406; Venezuela 3,614.
Hoop and strip	286	504	66	Japan 427; Belgium-Luxembourg 6.
Rails and accessories	331	14	--	All from Barbados.
Wire	r2,771	2,636	493	United Kingdom 468; Belgium-Luxembourg 411.
Tubes, pipes, fittings	3,021	3,608	2,145	West Germany 761; United Kingdom 307.
Castings and forgings, rough	30	21	17	Canada 4.
Unspecified	2	27	20	United Kingdom 5; Canada 2.
Lead:				
Oxides	251	207	178	United Kingdom 18; Netherlands 6.
Metal including alloys:				
Scrap	2	20	--	All from Trinidad and Tobago.
Unwrought	6	286	108	Trinidad and Tobago 178.
Semimanufactures	26	62	51	United Kingdom 9; Switzerland 2.
Magnesium: Metal including alloys:				
Unwrought value	$36	--	--	
Semimanufactures do	r$1,315	$1,408	$1,408	
Manganese: Ore and concentrate	193	53	--	United Kingdom 19; Belgium-Luxembourg 17; West Germany 17.
Molybdenum: Metal including alloys:				
Unwrought kilograms	443	10	10	
Semimanufactures	(2)	17	--	All from Taiwan.
Nickel: Metal including alloys, semimanufactures	2	3	(2)	West Germany 2; Canada 1.
Platinum-group metals: Metals including alloys, unwrought and partly wrought value	$10,296	$1,380	$1,202	United Kingdom $178.
Silver:				
Waste and sweepings do	$172	$3,240	--	All from France.
Metal including alloys, unwrought and partly wrought troy ounces	32,215	31,508	5,819	United Kingdom 9,806; Canada 7,941; West Germany 7,941.
Tin: Metal including alloys:				
Scrap value	--	$2,400	$2,400	
Unwrought	--	1	1	
Semimanufactures	8,228	3,885	(2)	Netherlands 3,231; United Kingdom 654.
Titanium: Oxides	605	682	455	United Kingdom 209; Canada 18.
Tungsten:				
Ore and concentrate value	$517	--		
Metal including alloys, semimanufactures kilograms	117	70	70	
Uranium and thorium: Metal including alloys, all forms do	578	1,302	1,302	
Zinc:				
Ore and concentrate	--	2	--	All from Canada.
Oxides	95	151	77	Netherlands 53; United Kingdom 21.
Blue powder	16	1	--	All from Trinidad and Tobago.
Metal including alloys:				
Unwrought	548	629	429	France 100; Canada 98.
Semimanufactures	15	2	1	United Kingdom 1.
Other:				
Ores and concentrates	3	3	--	All from United Kingdom.
Oxides and hydroxides	122	229	86	Japan 66; United Kingdom 59.
Ashes and residues value	--	$13	--	All from United Kingdom.
Base metals including alloys, all forms kilograms	6	60	60	

See footnotes at end of table.

Table 12.—Jamaica: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986: United States	Sources, 1986: Other (principal)
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc	24	23	22	United Kingdom 1.
Dust and powder of precious and semiprecious stones excluding diamond value	--	$644	--	All from United Kingdom.
Grinding and polishing wheels and stones	26	152	3	Spain 142; United Kingdom 3.
Asbestos, crude	3	31	28	United Kingdom 3.
Barite and witherite value	$2,983	$5	$5	
Boron materials: Crude natural borates do.	$286	--	--	
Cement	2,374	16,003	82	Barbados 14,304; Trinidad and Tobago 1,200; Colombia 125.
Chalk	6	13	--	All from United Kingdom.
Clays, crude	332	384	380	United Kingdom 4.
Diamond: Industrial stones value	--	$3,762	--	All from United Kingdom.
Diatomite and other infusorial earth	27	104	104	
Feldspar, fluorspar, related materials	9	13	13	
Fertilizer materials:				
Crude, n.e.s	65	465	415	Dominican Republic 50.
Manufactured:				
Ammonia	157	148	51	Japan 89; United Kingdom 8.
Nitrogenous	17,023	21,842	637	Canada 21,151; West Germany 50.
Phosphatic	890	312	309	West Germany 3.
Potassic	183	3,096	182	Canada 2,914.
Unspecified and mixed	6,393	11,892	2,292	Canada 9,550; Dominican Republic 50.
Graphite, natural value	$2	$2,248	$2,054	United Kingdom $194.
Gypsum and plaster	51	62	62	
Lime value	$138	$956	$956	
Magnesium compounds:				
Magnesite, crude	(e)	--	--	
Oxides and hydroxides value	--	$14	--	All from United Kingdom.
Other	70	17	8	United Kingdom 9.
Mica:				
Crude including splittings and waste	119	103	3	Norway 77; Netherlands 23.
Worked including agglomerated splittings kilograms	9,501	180	180	
Nitrates, crude value	$7,531	$258	$258	
Phosphates, crude	114	283	283	
Pigments, mineral:				
Natural, crude	21	24	(e)	Mainly from West Germany.
Iron oxides and hydroxides, processed	53	27	6	West Germany 7; United Kingdom 5.
Precious and semiprecious stones other than diamond, synthetic value	$246	--	--	
Salt and brine	25,058	20,542	20,395	United Kingdom 90; Canada 57.
Sodium compounds, n.e.s.:				
Carbonate, manufactured	4,244	6,016	5,675	France 279; Netherlands 21.
Sulfate, manufactured	r1,103	970	63	Mexico 500; Belgium-Luxembourg 361.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	116	124	4	Italy 100; West Germany 20.
Worked	11	3	3	
Dolomite, chiefly refractory-grade	14	--	--	
Gravel and crushed rock	435	23	18	United Kingdom 5.
Limestone other than dimension value	$148	$604	$604	
Quartz and quartzite	15	26	1	Italy 25.
Sand other than metal-bearing	910	20	20	
Sulfur:				
Elemental:				
Crude including native and byproduct	28	68	48	Belgium-Luxembourg 20.
Colloidal, precipitated, sublimed	2,947	302	301	West Germany 1.
Dioxide	1	--	--	
Sulfuric acid	1,592	4	4	
Talc, steatite, soapstone, pyrophyllite	463	1,170	1,099	Norway 46; Netherlands 23.
Other:				
Crude	26	14	(e)	Mainly from Canada.
Slag and dross, not metal-bearing	2	--	--	

See footnotes at end of table.

Table 12.—Jamaica: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	18	736	72	Venezuela 664.
Carbon black	952	740	35	Venezuela 687; Singapore 18.
Coal:				
Anthracite value	$776	$810	$810	
All grades including briquets	--	5,090	--	All from West Germany.
Coke and semicoke	r102	55	38	West Germany 10; United Kingdom 7.
Peat including briquets and litter	45	22	22	
Petroleum:				
Crude 42-gallon barrels	63	31	31	
Refinery products:				
Liquefied petroleum gas thousand 42-gallon barrels	522	601	458	Venezuela 132; Mexico 11.
Gasoline do.	587	788	65	Venezuela 431; Trinidad and Tobago 183; Netherlands Antilles 80.
Mineral jelly and wax do.	10	14	9	United Kingdom 3; West Germany 1.
Kerosene and jet fuel do.	328	607	50	Venezuela 360; Netherlands Antilles 138; Trinidad and Tobago 59.
Distillate fuel oil do.	286	399	144	Netherlands Antilles 120; Venezuela 119.
Lubricants do.	55	27	15	France 10; United Kingdom 1.
Residual fuel oil do.	11,347	20,689	2,943	Netherlands Antilles 10,070; Venezuela 4,227.
Bitumen and other residues do.	1	137	(2)	Venezuela 62; Trinidad and Tobago 41; Netherlands Antilles 33.
Bituminous mixtures do.	1	1	1	
Petroleum coke value	$261	$37	$37	

r Revised.
[1] Table prepared by H. D. Willis.
[2] Less than 1/2 unit.
[3] Revised to zero.

NETHERLANDS ANTILLES[14]

Petróleos de Venezuela S.A. (PDVSA) was planning to invest in its subsidiary, Refinería Isla de Curazao S.A. on the island of Curaçao. Before making the investment, PDVSA wanted a 10-year lease to guarantee return on the refinery. The 320,000-barrel-per-day refinery has been leased to PDVSA since 1985. The company had been producing at about 50% capacity in 1986 but planned to increase production to 185,000 barrels per day in 1987. Imports of crude oil from countries other than Venezuela would cover requirements that exceeded the Organization of Petroleum Exporting Countries (OPEC) quotas. After the company imported 150,000 barrels of crude from countries other than Venezuela, the rising spot prices forced PDVSA to decrease production at the Curaçao refinery by 50,000 barrels per day.

During a visit to the Netherlands Antilles that ended in November, the President of Venezuela signed a protocol that extended PDVSA's lease of the Curaçao refinery for 4 years. The lease will expire on September 30, 1994, and the lease payment was increased from $11 to $15 million per year.[15] Products from this refinery are exported mainly to the United States and to Caribbean countries.

TRINIDAD AND TOBAGO[16]

Trinidad and Tobago's economy declined by almost 7% in 1987. The construction and petroleum industries were the main sectors of the economy that contributed to the decline. Trinidad and Tobago, in a recession since 1982, continued to depend heavily on oil for its export revenues in 1987. However, efforts were being made to increase the export share of products other than oil, which in the first 4 months of 1987 was

more than three times that of 1985 and 17% higher than that of 1986. To avoid further contraction of its economy because of depressed oil prices and to address some of the country's economic problems, the Government was planning new development policies, which included divestment of Government-owned enterprises, better marketing of tourism, a more liberal foreign investment law, and national tax reform.

In agreement with the plans to attract more foreign investment to the country, the Government approved a new foreign investment policy. The policy created a "one-stop" investment office at the Trinidad and Tobago Industrial Development Corp. to reduce investors' processing time. The incentives for investors under the new policy include tax concessions, grants for research and development, special benefits for those businesses that would be in rural areas, and allowances for foreign investors to own up to 20% of local company shares without obtaining an alien landholding license. In select cases, the investor may have 100% ownership with the requirement to contribute 100% of foreign capital and 75% of technology. The areas in which the Government has established priorities include asphalt, chemicals, plastics, and downstream steel products.

On June 13, 1987, the 12% stamp duty on imports from some Caribbean Community and Common Market (CARICOM) countries was temporarily removed for a period of 12 months. Trinidad and Tobago would only remove the duty on those countries that exempt CARICOM products from similar taxes. The Government also expressed its intention to look into its import license system, considered to be a form of import control.

Reports indicated that the Government was trying to restructure and privatize the Iron and Steel Co. of Trinidad and Tobago (ISCOTT), which has continuously lost money since it began operation in 1981. In 1987, the International Finance Corp. (IFC), an affiliate of the International Bank for Reconstruction and Development (World Bank), was asked by the Prime Minister to study the privatization of ISCOTT and to assist the Government in the negotiations with potential buyers. Neue Hamburger Stahlwerke (Hamburger) of the Federal Republic of Germany and Voest-Alpine AG of Austria, ISCOTT's managers since 1986, were among the potential buyers. Several U.S. companies and a domestic company, Central Trinidad Steel Ltd., were also interested in the mill.

The recommendation by IFC specified that the Government should assume responsibility for ISCOTT's debt, spend $28 million[r] in upgrading the facility, and lease it to Hamburger for 10 years. Hamburger should then set up a steelworks centered around ISCOTT.

After years of complaints of dumping and unfair market practices by U.S. steel producers, Trinidad and Tobago agreed to limit its steel exports to the United States. In response to the voluntary quota, the United States agreed to lift a 16.4% tariff it had imposed on steel products from Trinidad and Tobago in 1984. The quota, 73,500 tons of steel per year to the United States, was to be retroactive to October 1, 1984, and limits Trinidad and Tobago's annual exports to the United States to 40,000 tons of wire rods, 3,500 tons of billets, and 30,000 tons of other steel products. The United States in turn was to reimburse the duties paid since that date. The agreement will remain in effect until September 30, 1989.

Five U.S. producers filed an initial complaint with the U.S. Government in 1983. The producers charged that ISCOTT was being subsidized by the Government and that ISCOTT was dumping its output in the United States. The 16.4% antidumping and countervailing duty was imposed after an investigation was conducted by the U.S. Department of Commerce and the U.S. International Trade Commission. The 1987 voluntary quota represents less than 10% of ISCOTT's production capacity.

Trinscat Ltd., the first plant opened under the U.S. Caribbean Basin Initiative, was formally opened in 1987. The company, owned 60% by the United States-based company Castech Inc. and 40% by Trinidad and Tobago's Neal and Massy Co. Inc., began production in July 1986 and produces about 4,100 tons of bronze castings. Trinscat products replaced items that were previously imported from the Republic of South Africa. The company has a capacity of earning as much as $ 4.1 million of foreign exchange per year.

Trinidad and Tobago continued to be among the leading exporters of nitrogenous fertilizers in the world. Production in 1987 remained at about the same level of that of 1986. In 1987, the Government announced plans to build a major fertilizer complex adjacent to its urea plant in Point Lisas. The project, a 1,500-ton-per-day anhydrous ammonia plant would provide continuous

feedstock to the urea plant; would increase the country's consumption of its natural gas output; and would be built with the assistance of Japan, Norway, and the United States. The joint venture among the Government of Trinidad and Tobago (51%), and M. W. Kellogg Co. of the United States and Norsk Hydro A/S of Norway (24.5% each) was being financed by Mitsubishi. M. W. Kellogg designed the plant and will provide the engineering, procurement, and construction services.

The Minister of Mines and Energy indicated that Trinidad and Tobago was seriously considering the possibility of joining or maintaining a specific link with OPEC.

The Cabinet approved a new energy policy draft aimed at optimizing offshore oil reserves, introducing production of low-octane gasoline, and increasing natural gas output.

Feasibility studies for Government and private exploitation of natural gas reserves off the southeastern coast of Trinidad were commissioned. The Government was accepting proposals from foreign investors, and two cabinet-appointed committees were considering former proposals for the development of South East Coast Consortium (SECC) and Amoco Trinidad Oil Co.'s gas exploration facilities expansion project. Later in the year, the committees recommended that SECC should initially carry out the project development off the southeastern coast of Trinidad with Amoco possibly doing some development later. Accordingly, the Government decided to continue with its plans of developing its own gas facilities. The Government also decided to ask Amoco to develop the facilities in the long term. Production from the $117 million natural gas platform was planned to be 65 million cubic feet per day. The startup date was planned for 1990. Reportedly, Amoco's involvement in the project would begin with the development of a second platform after the first platform had been in production for approximately 3 to 4 years and its production had begun to decline.

A pilot project initiated by the Government in 1986 to use natural gas as a fuel for motor vehicles, and was to involve 250 Government vehicles for 5 years, met with modest success but was still being pursued by Natural Gas System (NGS), a local company. During the first 12 months of the program, only 24 cars made the changeover from gasoline to natural gas. As a result, NGS registered significant losses. The cost of installing the natural gas tank was approximately $1,000 per car. During the year, only one supply station was available. The company had plans to open two additional stations in the near future.

The Government was considering a $200 million methanol plant at Point Fortin proposed by Union Carbide Corp. and Wimpney Ltd., a British firm.

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[1]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[2]Where necessary, values have been converted from Aruban florins (AF1$) to U.S. dollars at the rate of AF1$1.79 = US$1.00.

[3]By Harold R. Newman, physical scientist, Division of International Minerals.

[4]By Harold R. Newman, physical scientist, Division of International Minerals.

[5]Where necessary, values have been converted from Barbadian dollars (Bds$) to U.S. dollars at the rate of Bds$2.0113 = US$1.00.

[6]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[7]Where necessary, values have been converted from Cuban pesos (CP$) to U.S. dollars at the rate of CP$0.7 = US$1.00.

[8]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[9]Where necessary, values have been converted from Dominican pesos (RD$) to U.S. dollars at the rate of RD$4.96 = US$1.00.

[10]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[11]Where necessary, values have been converted from Haitian gourdes (HG$) to U.S. dollars at the rate of HG$5.0 = US$1.00.

[12]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[13]Where necessary, values have been converted from Jamaican dollars (J$) to U.S. dollars at the rate of J$5.5 = US$1.00.

[14]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[15]Where necessary, values have been converted from Netherlands Antillean guilders (NAE$) to U.S. dollars at the rate of NAE$1.8 = US$1.00.

[16]Prepared by Ivette E. Torres, physical scientist, Division of International Minerals.

[17]Where necessary, values have been converted from Trinidadian and Tobagar dollars (TT$) to U.S. dollars at the rate of TT$3.6 = US$1.00.

Table 12.—Trinidad and Tobago: Exports and reexports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Destinations, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Oxides ... kilograms	600	--		
Metal including alloys:				
Scrap	72	24	--	All to Netherlands.
Unwrought	--	25	--	All to Pakistan.
Semimanufactures	190	53	40	Grenada 9; Guyana 4.
Chromium: Oxides and hydroxides ... kilograms	600	--		
Copper: Metal including alloys:				
Scrap	875	691	49	West Germany 272; United Kingdom 259; Netherlands 94.
Unwrought	9	27	--	Mainly to United Kingdom.
Semimanufactures	1	297	266	Barbados 1.
Iron and steel: Metal:				
Scrap	120	87	14	United Kingdom 37; West Germany 36.
Pig iron, cast iron, related materials	61,226	54,371	(2)	Venezuela 53,207; Barbados 1,160; Grenada 4.
Ferroalloys	28	--		
Steel, primary forms	1,271	28,290	--	Italy 11,516; Ecuador 10,176; Dominican Republic 5,896.
Semimanufactures:				
Bars, rods, angles, shapes, sections	104,781	227,471	97,923	Canada 40,339; West Germany 16,531.
Universals, plates, sheets	63	539	116	United Kingdom 231; Martinique 86.
Hoop and strip ... value	$678	$78	--	Barbados $50; St. Christopher and Nevis $28.
Rails and accessories ... do.	$541	$187	--	All to St. Vincent.
Wire	58	161	4	St. Vincent 87; St. Lucia 51; Grenada 45.
Tubes, pipes, fittings	464	4,511	4,473	St. Vincent 8; Guyana 7.
Castings and forgings, rough ... kilograms	195	1,490	--	Grenada 840; Panama 500; Guyana 150.
Lead:				
Oxides	--	40	--	All to Barbados.
Metal including alloys:				
Unwrought	153	210	--	Jamaica 188; Honduras 22.
Semimanufactures ... kilograms	NA	601	--	St. Lucia 600; bunkers 1.
Nickel: Metal including alloys:				
Scrap	--	75	--	Netherlands 50; West Germany 25.
Semimanufactures ... kilograms	--	75	--	Grenada 25; Guyana 20; bunkers 30.
Platinum-group metals: Metals including alloys, unwrought and partly wrought ... troy ounces	--	32	32	
Silver:				
Waste and sweepings[3] ... kilograms	r135	218	200	Canada 18.
Metal including alloys, unwrought and partly wrought ... troy ounces	1,808	2,958	--	All to Canada.
Tin: Metal including alloys:				
Scrap	--	199	199	
Semimanufactures ... value	--	$1,973	--	Jamaica $1,959; Grenada $14.
Titanium: Oxides	--	2	--	All to Barbados.
Tungsten: Metal including alloys, unwrought ... kilograms	--	116	--	Venezuela 96; Guyana 20.
Zinc: Metal including alloys, semimanufactures ... do.	--	100	--	All to Guyana.
Other:				
Oxides and hydroxides ... do.	645	400	--	All to Barbados.
Base metals including alloys, all forms ... do.	110	--		
INDUSTRIAL MINERALS				
Abrasives, n.e.s.: Grinding and polishing wheels and stones ... do.	606	234	7	Guyana 190; Grenada 30.
Barite and witherite ... value	--	$135	--	All to Barbados.
Cement	6	9,832	--	Grenada 2,211; St. Vincent 1,329; St. Christopher and Nevis 1,300.
Chalk	4	--		
Clays, crude	18	1,121	160	Barbados 961.

See footnotes at end of table.

Table 13.—Trinidad and Tobago: Exports and reexports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Destinations, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Diamond:				
Gem, not set or strung ---- carats	2	--		
Industrial stones ---- value	$959	$2,897	NA	NA.
Fertilizer materials: Manufactured:				
Ammonia ---- thousand tons	1,157	1,121	525	Belgium-Luxembourg 169; Denmark 133.
Nitrogenous	361,627	506,894	169,350	France 79,669; Canada 68,962.
Phosphatic ---- value	$1,429	$97	--	All to Guyana.
Potassic ---- do.	--	$344	--	Grenada $263; Guyana $81.
Unspecified and mixed	--	8	--	Guyana 5; St. Lucia 3.
Gypsum and plaster ---- value	$245	$340	--	Guyana $173; St. Vincent $167.
Lime ---- do.	$440	$534	--	Grenada $294; St. Lucia $185; Dominica $55.
Mica:				
Crude including splittings and waste	3	--		
Worked including agglomerated splittings ---- kilograms	10	--		
Pyrite, unroasted ---- value	--	$33	--	All to Barbados.
Salt and brine	193	18	--	Grenada 6; St. Christopher and Nevis 4; St. Vincent 4.
Sodium compounds, n.e.s.:				
Carbonate, manufactured kilograms	545	3	--	All for bunkers.
Sulfate, manufactured ---- do.	140	20	--	All to Venezuela.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked value	$4	$639	--	Grenada $556; St. Vincent $33.
Worked ---- do.	--	$316	$28	Grenada $288.
Gravel and crushed rock	2	32	--	Anguilla 25; Grenada 7.
Limestone other than dimension	--	13	--	All to Guyana.
Sand other than metal-bearing	20	82	--	Grenada 62; Anguilla 20.
Sulfur: Sulfuric acid ---- kilograms	--	143	--	Dominica 140; Grenada 3.
Talc, steatite, soapstone, pyrophyllite value	$1,480	$411	--	All to Guyana.
Other: Crude	--	27	--	Barbados 14; Grenada 13.
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	31,786	30,512	311	West Germany 12,848; United Kingdom 3,746; Guadeloupe 3,114.
Coal: Briquets of anthracite and bituminous coal	--	60	--	All to Grenada.
Peat including briquets and litter	--	1	--	Mainly to Antigua.
Petroleum:				
Crude ---- thousand 42-gallon barrels	35,300	32,867	32,867	
Refinery products:				
Liquefied petroleum gas do.	262	197	--	Barbados 41; Guyana 30; French Guiana 23.
Gasoline ---- do.	3,084	2,896	476	Japan 426; Suriname 373.
Mineral jelly and wax ---- do.	(2)	(2)	--	Mainly to Barbados.
Kerosene and jet fuel ---- do.	2,493	2,145	258	Barbados 486; Japan 281.
Distillate fuel oil ---- do.	4,090	3,955	1,317	Canada 419; Suriname 367.
Lubricants ---- do.	18	13	1	Dominica 3; St. Lucia 1; bunkers 4.
Residual fuel oil ---- do.	15,056	15,319	10,351	Italy 2,019; United Kingdom 1,114.
Bitumen and other residues do.	(2)	912	--	Grenada 731; Guyana 181.
Bituminous mixtures ---- do.	20	25	9	Netherlands Antilles 5; Grenada 4.
Unspecified ---- do.	(4)	--		

[1]Revised. NA Not available.
[2]Table prepared by H. D. Willis.
[3]Less than 1/2 unit.
[4]May include other precious metals.
[4]Revised to zero.

Table 14.—Trinidad and Tobago: Imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Ore and concentrate	315	450	450	
Oxides and hydroxides	43	29	2	United Kingdom 27.
Metal including alloys:				
Scrap	--	20	--	Mainly from Venezuela.
Unwrought	14	60	46	Canada 14.
Semimanufactures	11,160	1,714	1,135	United Kingdom 225; Jamaica 192.
Chromium: Ore and concentrate	4	3	--	All from Netherlands.
Copper:				
Ore and concentrate, value	--	$315	$315	
Matte and speiss including cement copper, do.	--	$222	--	All from Grenada.
Sulfate	15	5	(2)	Mainly from United Kingdom.
Metal including alloys:				
Scrap	1	120	117	Grenada 2; St. Vincent 1.
Unwrought	1	112	41	Chile 71.
Semimanufactures	1,058	797	70	United Kingdom 365; Canada 277.
Iron and steel:				
Iron ore and concentrate excluding roasted pyrite	318,284	400,061	--	All from Brazil.
Metal:				
Scrap	5,261	2,200	--	All from Guyana.
Pig iron, cast iron, related materials	66	3	--	All from United Kingdom.
Ferroalloys:				
Ferromanganese	399	158	--	Norway 126; West Germany 32.
Ferrosilicon	454	1,225	252	Norway 837; United Kingdom 130.
Unspecified	1,602	1,060	50	Norway 810; United Kingdom 180.
Steel, primary forms	2,564	4,348	(2)	Japan 1,171; West Germany 1,066; Italy 881.
Semimanufactures:				
Bars, rods, angles, shapes, sections	13,629	89,466	34,544	United Kingdom 15,842; Japan 15,155.
Universals, plates, sheets	26,962	26,284	364	United Kingdom 4,369; Canada 2,539; Jamaica 2,228.
Hoop and strip	815	349	93	Japan 209; United Kingdom 47.
Rails and accessories	71	5	5	
Wire	3,226	2,489	207	Venezuela 842; Belgium-Luxembourg 739; United Kingdom 342.
Tubes, pipes, fittings	36,340	76,689	19,591	Taiwan 25,082; Argentina 7,913.
Castings and forgings, rough	(2)	6	6	
Lead:				
Oxides	5	25	1	United Kingdom 24.
Metal including alloys:				
Scrap	719	81	--	Barbados 80; Grenada 1.
Unwrought	22	(2)	(2)	
Semimanufactures	7	3	(2)	Mainly from United Kingdom.
Magnesium: Metal including alloys, all forms	3	4	3	United Kingdom 1.
Manganese: Ore and concentrate	1	4,040	500	Norway 2,000; West Germany 880.
Molybdenum: Metal including alloys, semimanufactures, kilograms	2	--		
Nickel:				
Matte and speiss, value	$970	--		
Metal including alloys, semimanufactures	6	1	(2)	Mainly from United Kingdom.
Platinum-group metals: Metals including alloys, unwrought and partly wrought, value	$4,171	$10,431	$6,783	United Kingdom $3,145; Switzerland $503.
Silver:				
Waste and sweepings, kilograms	132	--		
Metal including alloys, unwrought and partly wrought, value	$94,297	$97,271	$22,433	Canada $73,907; Italy $931.
Tin: Metal including alloys:				
Unwrought	1	3	(2)	Mainly from United Kingdom.
Semimanufactures	15	65	(2)	Japan 57; United Kingdom 7.
Titanium: Oxides	1,315	1,043	295	United Kingdom 449; Finland 294.
Tungsten: Metal including alloys:				
Unwrought, kilograms	--	201	201	
Semimanufactures, do.	19	341	339	Switzerland 2.

See footnotes at end of table.

Table 14.—Trinidad and Tobago: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
METALS —Continued				
Zinc:				
Ore and concentrate	--	17	17	
Oxides	212	98	4	United Kingdom 82; Belgium-Luxembourg 5.
Blue powder	69	53	49	Norway 2; United Kingdom 1.
Metal including alloys:				
Scrap	43	49	--	All from Canada.
Unwrought	605	401	13	Canada 378; United Kingdom 10.
Semimanufactures	73	4,257	1	United Kingdom 4,256.
Other:				
Ores and concentrates	13	7,278	7,278	
Oxides and hydroxides	15	5	(2)	Italy 3; West Germany 1.
Base metals including alloys, all forms kilograms	8,799	2,734	2,561	West Germany 87; United Kingdom 83.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc value	$48,109	$2,549	$1,324	Colombia $1,190; United Kingdom $35.
Artificial: Silicon carbide	(2)	--		
Dust and powder of precious and semiprecious stones value	$122	$26	$26	
Grinding and polishing wheels and stones	1,104	3,523	3,453	Venezuela 36; United Kingdom 13.
Asbestos, crude	(2)	5	--	All from Netherlands.
Barite and witherite	19,809	19,081	--	Morocco 18,986; West Germany 88; Netherlands 7.
Boron materials: Crude natural borates	4	2	--	All from United Kingdom.
Cement	64,549	10,853	865	West Germany 5,294; Barbados 3,500.
Chalk	698	942	95	France 545; United Kingdom 302.
Clays, crude	2,402	3,742	3,487	United Kingdom 247; Canada 8.
Diamond:				
Gem, not set or strung carats	10,342	825	72	India 484; United Kingdom 206.
Industrial stones do.	5,000	--		
Diatomite and other infusorial earth	9,082	75	39	Netherlands 29; United Kingdom 7.
Feldspar, fluorspar, related materials	106	107	--	Netherlands 60; United Kingdom 38; Canada 9.
Fertilizer materials:				
Crude, n.e.s	5	88	--	All from Netherlands.
Manufactured:				
Ammonia	5	17,506	17,501	Netherlands 6; West Germany 1.
Nitrogenous	2,990	1,782	184	Belgium-Luxembourg 632; Dominican Republic 422; Netherlands 250.
Phosphatic	6,338	2,327	1,136	Netherlands 1,178; Dominican Republic 7.
Potassic	669	3,125	1,661	Netherlands 614; Martinique 500.
Unspecified and mixed	5,310	13,022	9,231	West Germany 2,901; Netherlands 261.
Graphite, natural	(2)	2	2	
Gypsum and plaster	3,410	10,973	33	Jamaica 10,798; United Kingdom 85; West Germany 57.
Lime	4,200	4,210	--	United Kingdom 4,086; Canada 124.
Magnesium compounds: Magnesite, crude	(2)	4	(2)	Mainly from United Kingdom.
Mica:				
Crude including splittings and waste	117	129	--	United Kingdom 71; Norway 58.
Worked including agglomerated splittings kilograms	11	3	--	All from United Kingdom.
Phosphates, crude	236	168	68	United Kingdom 100.
Pigments, mineral: Iron oxides and hydroxides, processed	119	304	(2)	West Germany 215; Canada 40; Denmark 36.
Potassium salts, crude	--	82	--	Netherlands 80; Canada 2.
Precious and semiprecious stones other than diamond:				
Natural value, thousands	$882	$862	$7	Canada $442; Belgium-Luxembourg $357; India $56.
Synthetic do.	$16	$44	$4	India $35; France $2.
Pyrite, unroasted	--	5	5	
Salt and brine	15,351	86,841	83	West Germany 63,001; Netherlands Antilles 19,403; United Kingdom 923.
Sodium compounds, n.e.s.:				
Carbonate, manufactured	5,232	9,451	4,920	West Germany 2,417; France 2,000.
Sulfate, manufactured	2,604	2,438	89	Belgium-Luxembourg 2,248; West Germany 42.

See footnotes at end of table.

Table 14.—Trinidad and Tobago: Imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986	Sources, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	179	94	40	China 34; West Germany 20.
Worked	205	35	4	Italy 21; Barbados 5.
Dolomite, chiefly refractory-grade	34	(2)	(2)	
Gravel and crushed rock	11,353	3,054	2,519	China 483; Venezuela 29.
Limestone other than dimension	14,779	11,586	1,632	Barbados 8,022; Netherlands Antilles 1,264.
Quartz and quartzite	2	36	--	United Kingdom 28; Netherlands 8.
Sand other than metal-bearing	7,256	715	702	United Kingdom 12; Japan 1.
Sulfur:				
Elemental:				
Crude including native and byproduct	37	37	--	All from United Kingdom.
Colloidal, precipitated, sublimed kilograms	2,248	618	--	Netherlands 600; United Kingdom 14; West Germany 4.
Dioxide do	183	40,715	40,704	United Kingdom 11.
Sulfuric acid	5,126	5,800	1,580	Spain 3,875; West Germany 229.
Talc, steatite, soapstone, pyrophyllite	621	507	312	Norway 151; United Kingdom 19.
Other:				
Crude	72	690	690	
Slag and dross, not metal-bearing	55	127	127	
MINERAL FUELS AND RELATED MATERIALS				
Asphalt and bitumen, natural	5	2	2	
Carbon black	1,077	790	154	Venezuela 634; United Kingdom 2.
Coal: All grades including briquets	1,441	1,564	1,556	United Kingdom 5; Canada 3.
Coke and semicoke	49	253	223	West Germany 20; United Kingdom 10.
Peat including briquets and litter	11,672	1,304	212	Canada 841; Ireland 120.
Petroleum:				
Crude thousand 42-gallon barrels	1,286	(2)	(2)	
Refinery products:				
Liquefied petroleum gas 42-gallon barrels	709	95	8	Italy 86; United Kingdom 1.
Gasoline do	[r]25	31	--	All from United Kingdom.
Mineral jelly and wax do	3,533	5,107	1,255	United Kingdom 2,664; West Germany 681.
Kerosene and jet fuel do	(2)	80,396	--	Venezuela 52,708; Argentina 27,688.
Distillate fuel oil do	160,755	893,021	855	Venezuela 871,239; Panama 20,354.
Lubricants including nonlubricating oils do	63,038	82,799	17,548	Netherlands Antilles 42,573; United Kingdom 8,307.
Residual fuel oil do	57,873	667,638	667,625	Belgium-Luxembourg 13.
Bitumen and other residues do	109	91	18	United Kingdom 73.
Bituminous mixtures do	8,242	479	121	Canada 194; United Kingdom 158.
Petroleum coke do	671	3,036	3,036	

[r]Revised.
[1]Table prepared by H. D. Willis.
[2]Less than 1/2 unit.
[3]Revised to zero.

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